

Examiners' Report, Paper C - 2005

GENERAL COMMENTS

1. The overall standard of candidates' answers was comparable to the standard of last year.

The answer papers show that candidates have difficulty handling issues, which have not been raised in previous years' papers. In particular, the attacks against the product-by-process claim 5 and the exclusion from patentability under Article 52(4) EPC (claim 6) were missed by many candidates.

2.1 Whilst the number of candidates using the problem-solution approach for the inventive step attacks continues to increase, many candidates still lose marks due to poor argumentation. For example, when identifying a document as the closest prior art, it is not sufficient merely to state that it has the most features in common with the claim and belongs to the same technical field. For each inventive step attack, a brief rationale, supported by reference to the subject matter of the claim, should be given why a document is chosen as the closest prior art.

2.2 When applying the problem-solution approach, a full identification of the distinction between a claim feature and the disclosure in the closest prior art, by relating the claim feature to a different feature disclosed in that art, is central to the assessment of the technical effect and the objective technical problem. An incomplete identification often seemed to lead to an incorrect or incomplete analysis of the technical significance of a differing feature in relation to the prior art. For example, when attacking claim 2, it was often merely stated that the use of hot air as required by the claim is not disclosed in Annex 4, rather than stating that claim 2 requires the use of hot air instead of the IR lamp disclosed in Annex 4.

2.3 Many candidates, after correctly identifying the differences between the claim under consideration and the closest prior art, immediately defined the technical problem to be solved without specifying the effect of the distinguishing feature. Further, a number of candidates defined the problem quite arbitrarily without basing it upon the information given in the documents. There was also sometimes the tendency to present the problem in terms of the actual solution, e.g. "the problem is to provide the tube with a horseshoe shape" and not "the problem is to reduce the diameter of the tube, thereby facilitating its insertion and reduced damage".

2.4 When comparing a claim with a prior art document, it may not be sufficient to simply repeat the wording of the claim and refer to the relevant passage in the prior art document. Candidates are expected to explain why a feature in the claim, which is disclosed in the prior art document using different terminology, can be construed to have the same meaning. For example, in claim 1 it should be argued why the term "liner tube" can be equated with the term "tubular film".

3. Most candidates earned good marks for the two novelty attacks against claim 1. Many candidates also earned high marks for the inventive step attack against claim 2, whereas attacks against claims 3 to 6 were generally poor.

4. In claim 3 when dependent upon claim 1, it was appropriate to make an inventive step attack in addition to the novelty attack under Article 54(2) because the novelty attack is based on the assumption that the claimed priority date is not valid. Should the opposition division disagree, the attack must be made under Article 54(3) and relies on the designation fees having been validly paid.

5. Some candidates' answers showed inconsistencies. For example, although they correctly stated that claim 3 when dependent on claim 1 is not entitled to priority, they nevertheless used Annex 3 under Art. 54(3) for attacking lack of novelty. A further example concerns Annex 5. Some candidates, in their answers to the legal questions, stated that this document cannot be used but nevertheless used it in the notice of opposition.

6. A number of candidates appeared to know the relevant law, but failed to apply it correctly into practice. For example, in claim 5, they cited the correct passage in the Guidelines relating to product-by-process claims, but drew the wrong conclusion, thereby missing the novelty attack. Another example is claim 6, where candidates cited the correct passage in the Guidelines, but did not substantiate why claim 6 falls under Article 52(4) EPC.

7. All relevant facts and arguments relating to the grounds of opposition must appear in the notice of opposition, since this is the document filed with the EPO. Marks were lost by candidates who addressed the priority problem only in a letter to the client or in notes to the examiner, but not in the notice of opposition. Similarly, candidates lost marks if they made no statement in the notice of opposition regarding the status of Annex 5 as prior art under Article 54(2) or how it came to be prior art.

8. Some candidates list the features of a claim and number them, using only this numbering for arguing the attacks. This not only makes marking more difficult, but also often leads to loss of marks due to incomplete substantiation.

9. A number of candidates used personalized abbreviations or even used a different numbering of the annexes. This practice is both time-consuming for the candidate and confusing for the examiner.

10. Some candidates waste time by starting the notice of opposition with a lengthy discussion of what the individual documents disclose and then repeating the same information when making their attacks against the claims.

11. It is pointed out that the submission of pre-prepared materials as part of the answer paper is contrary to the Regulations (see "Instructions to candidates concerning the conduct of the examination", paragraphs 4. and 5.7, published in Supplement to Official Journal 12/2004). Such materials will be disregarded for marking. Candidates are also reminded that feature charts prepared during the examination by candidates as an aid to analysis of the prior art will be disregarded.

12. As in previous years, many candidates lost time in writing long explanatory letters to the client instead of giving short precise answers to the questions posed in the client's letter.

SPECIFIC COMMENTS

Notice of opposition

Priority

The priority issue arising from the amendment to claim 3 was generally poorly answered. Many candidates incorrectly asserted that the amendment contravened Article 123(2).

Although many candidates noted the difference between claim 3 in the priority document and the patent, they merely stated that the claim had been amended without arguing that the priority document as a whole does not contain a basis for the amendment and without giving the reasons why claim 3 when dependent on claim 1 was not entitled to priority.

Annex 5

Many candidates did not state that the letter itself was prior art. Only a few indicated that the copy of the letter that was provided was evidence of the letter's content. Of those who relied on Annex 5, many did not state the circumstances of how it became prior art.

Claim 1

Many candidates made two novelty attacks using Annexes 3 and 4, respectively.

Most of the points were gained for the correct use of information. Candidates lost marks if they ignored the fact that the method of claim 1 concerns lining *sewer* pipes and did not argue where this feature can be found in Annexes 3 and 4.

Argumentation marks were lost by not arguing that "liner tube" and "tubular film" can be construed as one and the same. Argumentation marks were also lost by not arguing why the shape of the liner tube in Annex 4 can be considered as being modified.

Some candidates were wrongly of the opinion that the phrase “of lining a sewer pipe” has no limiting effect.

Concerning the use of Annex 3 as prior art under Article 54(3), most candidates mentioned the commonly designated contracting states, but failed to mention that the designation fees must have been validly paid.

Claim 2

In general, the inventive step attack using Annexes 4 and 2 was well-argued. Many candidates correctly applied the problem-solution approach.

However, it was poorly argued, why Annex 4 is considered as the closest prior art. It was not enough for achieving full argumentation marks to simply state that Annex 4 had most features in common.

Only a few candidates gave a reasonable explanation as to why the alternative heating method disclosed in Annex 2 is in fact suitable for the method of claim 2.

Claim 3

(i) Claim 3 dependent on claim 1:

Most candidates made a novelty attack under Article 54(2) using Annex 3. However, some candidates, including a number who had correctly attributed the filing date to the claim, wrongly based their attack upon Article 54(3).

Many candidates made an additional inventive step attack based upon a combination of Annexes 4 and 5. Marks were awarded for both novelty and inventive step attacks; those candidates who did not make the inventive step attack against claim 3 when dependent on claim 1, could achieve substantially the same amount of marks by making the analogous attack against claim 3 when dependent on claim 2.

(ii) Claim 3 dependent on claims 2 (+ 1):

Although many candidates used the correct combination of documents, it was often poorly argued why, in this instance, a combination of three documents can be used to render the claim obvious.

Claim 4

Few candidates spotted that three novelty attacks can be made.

Surprisingly few candidates stated that the term “for lining a pipe” is construed as “suitable for lining a pipe”. Among those who noted this point, very few substantiated why the tubing of Annexes 2 and 5, respectively, are suitable for this purpose. Some candidates wrongly stated that “for lining” had no limiting effect at all and could be disregarded.

With respect to Annexes 2 and 5, many candidates neither mentioned that polyethylene is a polyolefin nor substantiated this by reference to Annex 1.

Claim 5

Attacks against this claim were generally poor, showing that many candidates are not familiar with the construction of product-by-process claims.

A number of candidates referred to the correct passage in the Guidelines, but failed to apply this to the subject matter of the actual claim.

Many candidates merely referred to their argumentation for claim 2 arguing lack of inventive step and failed to realise and argue that the difference in the method does not lead to a different product (i.e. lack of novelty).

Claim 6

Although many candidates stated that the claim is not allowable under Article 52(4), the argumentation was often poor. In particular it was not argued that this type of use claim is construed as a method claim and that repairing arteries/veins requires a surgical step.

Only a few candidates stated that the subject-matter of the claim lacks industrial applicability.

Legal Issues

Use of Annex 5

Many candidates saw that Annex 5, although an abuse to the detriment of the proprietor, was outside the grace period under Article 55(1) EPC.

Few candidates, however, clearly stated that neither Mr. Hansen, the recipient of the letter, nor the people on the train were bound by confidentiality.

Many candidates offered further evidence (affidavits or hearing of witnesses), however, only a few mentioned on which points the evidence would be given.

Some candidates were confused by the fact that the name of the author of the letter was deleted and (wrongly) argued that if the letter is used, the identity of that person must be revealed.

The date of the prior use was often not correctly stated. Many candidates referred to the 12th October 1998, but it could have been as late as the 14th.

Partial revocation

This was in general well-answered. Some candidates included an unnecessary discussion of the situation that would prevail for a hypothetical Art. 54(3) document that did not designate all the countries of Annex 1.

Unity of invention

This was in general well-answered. Candidates were expected to refer to G1/91.

Accompanying person

Most candidates showed that they are familiar with the conditions set out in G4/95. Few candidates, however, mentioned that the US attorney is not an authorized representative in the sense of Art. 134 EPC.

Possible Solution - Paper C

Notice of opposition

(the first marks are for “use of information” and the second for “argumentation”)

Priority: (2/2)

The priority document contained no reference to a horseshoe-shaped liner of a material other than shape memory material. This feature is essential for achieving the desired shape recovery. Consequently, the combination of the features of claims 1 and 3 without the limitation of claim 2 cannot be derived directly and unambiguously from the priority application. According to Art. 87(1) EPC and G2/98, claim 3, referring to claim 1, does not enjoy the priority date; its relevant date is the filing date (26.11.99). All other claims have basis in the priority application and their claimed priority (27.11.98) is, therefore, valid.

Annex 5: (1/1)

This document is a copy of a letter received by Mr. Hansen, who was not bound to confidentiality. He showed the letter to Mr. Sandler and two of his colleagues, on or before the 14.10.1998, on a train to Amsterdam. Mr. Sandler and his colleagues were not bound to confidentiality either. The copy of the letter is submitted as evidence of the letter's content. The letter is therefore prior art under Art 54(2). Affidavits by one or more of these persons to support the above allegations will be submitted in due course. If necessary, they can be summoned to be heard as witnesses.

Claim 1, independent: (9/5)**(a) Lack of novelty, Art. 54(2), in view of Annex 4**

The term “liner tube” in Annex 4 can be construed as a “tubular film” because it is a relatively thin tube (see figures).

Annex 4 discloses a method of lining a sewer pipe with a liner tube having an outer diameter substantially matching the inner diameter of the sewer pipe (see paragraph [006], or claim, lines 1-2 and paragraph [001], l.1-2). The shape of the liner tube is modified to allow it to be introduced into the sewer pipe (claim, l. 3-4, or paragraphs [007] + [008]). It is evident that the shape is modified, cf. [006] – “original shape”, [008] – “diameter-reduced shape” and [009] – “returns to original shape”. The liner tube with the modified shape is introduced into the sewer pipe to be lined (claim, l. 4, or paragraph [008], l.3-4). The original shape of the liner tube is restored (claim, l. 5-6, or paragraph [009], l. 5-8).

(b) Lack of novelty, Art. 54(3), in view of Annex 3

Annex 3 is prior art under Art. 54(3) and (4) for the commonly designated (=all) contracting states (AT,BE,DE,DK,ES,FR,GB,IT,LU,NL,SE), provided that the designation fees were validly paid.

The term “liner tube” in Annex 3 can be construed as “tubular film” because it is a relatively thin tube (see figures).

Annex 3 discloses a method of lining a pipe, which may be a sewer pipe, with a liner tube of an outer diameter substantially matching the inner diameter of the pipe (paragraph [006], l.1-2). The shape of the liner tube is modified to allow it to be introduced into the sewer pipe (paragraph [007], l. 1-2). The liner tube with the modified shape is introduced into the sewer pipe to be lined (claim, l. 5, or paragraph [008], l.1-2). The original shape of the liner tube is restored (claim, l. 6, or paragraph [009], l. 2-4).

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Claim 2, dependent: (7/8)

Lack of inventive step, Art. 56, in view of A4 + A2

Annex 4 is the closest prior art because it is the only available document disclosing a method according to claim 1 in which use is made of the shape memory effect.

Annex 4, in addition to the features of claim 1, discloses that the liner tube (tubular film) is made of a material whose shape is thermally recoverable (claim, l. 3 or paragraph [006], l. 2-3). Modification of the shape of the liner tube takes place above the material's activation temperature (paragraph [007]), and the modified shape of the liner tube is fixed by cooling it to a temperature below the material's activation temperature (paragraph [008]). The original shape of the liner tube is restored by heating it to above the material's activation temperature (claim, l. 4-5 or paragraph [009]).

Claim 2 is distinguished therefrom in that heating is done by blowing hot air through the tubular film instead of by infrared lamp.

This distinguishing feature of heating with hot air does not lead to a different effect when compared with heating by infrared lamp (or, the effect could also be that the heating source is not pulled through the pipe).

The objective technical problem to be solved is therefore to find an alternative heating method to that of an infrared lamp (or to find a way to avoid the heating source being pulled through the pipe and thus being a potential source of damage to the lining).

Annex 2, which can be regarded as general common knowledge and prior art under Art. 54(2), teaches that heating of shape memory materials can be equally done by an infrared radiator, hot air or superheated steam (last sentence). Replacing the infrared lamp by an equivalent heating source solves either of the above-identified problems. It is evidently suited for the claimed method (air can be blown through the tubular film). Therefore, the subject-matter of claim 2 is rendered obvious by the combination of Annex 4 and Annex 2.

Claim 3, dependent: (8/13)

(i) Claim 3 dependent on claim 1

The claim does not enjoy the claimed priority date; its relevant date is the filing date (26.11.99).

(a) Lack of novelty, Art. 54(2), in view of Annex 3

Annex 3 discloses the features of claim 1.

It further discloses that the shape of the liner tube (tubular film) is modified by giving it a horseshoe-like cross-section (claim, l. 3 or paragraph [007], l. 2-4).

(b) Lack of inventive step, Art. 56, in view of Annex 4 and Annex 5

Annex 4 discloses the features of claim 1. It can be considered as the closest prior art because it relates to the same method as claim 1 and is concerned with modifying the shape of the tubular film in order to reduce its diameter.

Claim 3 is distinguished therefrom in that the shape of the tubular film is modified by giving it a horseshoe-like cross section, instead of axially stretching it as disclosed in Annex 4 (paragraph [007], l.2-5).

This has the effect that recovery of the tubular film to the original shape takes place without axial movement relative to the pipe inner wall (see. Annex 1, paragraph [010], l. 6-8) and also allows greater diameter reduction (Annex 1, paragraph [009], l. 6-7) as compared with Annex 4 (see paragraph [010]).

The objective technical problem to be solved can be considered as one of improving the method of Annex 4 to prevent damage to the liner tube during recovery or to allow greater diameter reduction of the liner tube and facilitate its introduction into the pipe, (Annex 4 paragraph [010], l. 2-4 and paragraph [007], l. 4-7).

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The solution to this problem is rendered obvious by the teaching of Annex 5. Annex 5 discloses a tubing of shape memory polyethylene (paragraph 1), which, according to Annex 1, paragraph [008], is a polyolefin. This material is suitable for being used for lining sewer pipes; see Annex 4, paragraph [006].

The tubing of Annex 5 is deformed into a U-shaped, i.e. horseshoe-like, cross-section. This allows for return to its original shape without change in length, i.e. without axial movement, and enables its outer dimensions to be varied greatly, i.e. allows significant diameter reduction (see paragraph 2).

Thus, Annex 5 provides the solution to the above-mentioned problem. Consequently, use of the tubing of Annex 5 in the method of Annex 4 leads immediately to claim 3 dependent on claim 1.

(ii) Claim 3, dependent on claim 2

Lack of inventive step, Art. 56, in view of A4+A2+A5

Annex 4 is the closest prior art document (for the same reasons as given above (for claim 2)). Claim 3 dependent on claim 2 is distinguished from Annex 4 by two features:

- (i) heating is effected by hot air instead of infrared lamp (see claim 2 above);
- (ii) the shape of the tubular film is modified by giving it a horseshoe-like cross-section instead of axially stretching it (see claim 3 dependent on claim 1 above).

These two features do not mutually influence each other and have no synergistic effect. They solve two separate partial problems and can therefore be treated separately.

For problem/solution of feature (i): see claim 2.

For problem/solution of feature (ii): see claim 3+1.

The method of claim 3 dependent on claim 2 is therefore rendered obvious by application of the teachings of Annex 2 and of Annex 5 to the method of Annex 4.

Claim 4, independent: (7/9)

“Tubular film for...” is interpreted as “tubular film suitable for ..”, see Guidelines, C-III, 4.8 or C-IV, 7.6.

(a) Lack of novelty, Art. 54(2), in view of Annex 4

The term “liner tube” is construed as “tubular film” (see claim 2 above).

Annex 4 discloses a liner tube of thermally recoverable polyolefin for lining a pipe (paragraph [006], l. 2-4).

(b) Lack of novelty, Art. 54(2), in view of Annex 2

The “tubing” described in Annex 2 can be construed as a “tubular film” since it is used as a shrink tubing to coat cables or pipes.

Annex 2 discloses tubing made of polymer material such as polyethylene whose shape is thermally recoverable (paragraph [001], l. 1-4). It is suitable for lining a pipe. There is a reference to “stretching” in paragraph [001], l. 6-9 which means that it is possible to reduce the diameter for introduction into a pipe, as described in Annex 4, paragraph [007]).

Polyethylene is a polyolefin, cf. Annex 1, [008], l. 2-3.

(c) Lack of novelty, Art. 54(2), in view of Annex 5

The term “tubing” in Annex 5 can be construed as “tubular film” in this context because it must not be too thick to in order to change its cross-section from round to roughly U-shaped.

The tubing according to Annex 5 consists of thermally recoverable polyethylene (paragraph 1);

It is suitable for lining a pipe because of its significant diameter variation (paragraph 2)

Polyethylene is a polyolefin (Annex 1, paragraph [008], l. 2-3).

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Claim 5, independent: (4/4)

Lack of novelty, Art. 54(2), in view of Annex 4

Annex 4 discloses the method steps of claim 2 except for the heating source, see claim 2 above. This difference in the method does not, however, lead to a difference in the product obtained thereby. Evidence for this can be found in Annex 2, last sentence.

Therefore, the product obtained by the method of claim 2 is not discernable from one obtained by the method of Annex 4, and, thus, is not new, see Guidelines C-III, 4.7b.

Claim 6, independent: (3/3)

Exclusion from patentability, Art. 52(4)

“Use ... for implanting into damaged arteries or veins” is construed as a method claim. See Guidelines C-IV, 4.2 para.1, last sentence.

The method of claim 6 is practiced on a patient, i.e. the human body, and includes at least one surgical step (penetrating the body and accessing the arteries/veins), so that it falls under the exclusion of Article 52(4) and lacks industrial applicability.

Legal Issues (14 marks)**Annex 5**

The sending of the letter to Mr. Hansen was evidently a breach of confidentiality by the author of the letter and an abuse to the detriment of the proprietor. However, Article 55(1) EPC is not applicable here because the abuse was more than six months before the filing date of the application, which is the relevant date according to G2/99 or G3/98.

The recipient of the letter, Mr. Hansen, was not bound to confidentiality.

Furthermore, the content of the letter was disclosed by Mr. Hansen to members of the public (Mr. Sandler and two other people) not bound to confidentiality during a journey to Amsterdam on or before the 14.10.1998. Annex 5 is a copy of the letter and is submitted as evidence of its content.

Evidence to support the allegations in connection with Annex 5 (written and oral disclosure) and non-confidentiality should be offered, e.g. affidavits by one or more of the people on the train or offer to hearing them as witnesses.

Partial revocation

An opposition for only some of the designated contracting states is not possible, Article 99(2) EPC or Guidelines D-I, 3.

Unity in opposition

The fact that claim 6 may relate to a different invention is of no importance because lack of unity is not a ground for opposition, Art. 100 and G 1/91.

Accompanying person

The US attorney is not an authorized representative before the EPO under Art. 134. Following from G4/95, oral submissions by a person accompanying the authorized representative are within the discretion of the opposition division.

Provided the criteria set out in G4/95 are met (name, qualification of the person and subject-matter on which the person wishes to speak are stated well in advance of the proceedings and the contributions are made within the responsibility of the authorized representative) the US attorney will normally be allowed to speak.

EXAMINATION COMMITTEE II Candidate No. _____

Paper C 2005 - Schedule of marks

| Category | Maximum possible | Marks awarded | |
|--------------------|------------------|---------------|--------|
| | | Marker | Marker |
| Use of information | 41 | | |
| Argumentation | 45 | | |
| Legal aspects | 14 | | |
| Total | 100 | | |

Examination Committee II agrees on marks and recommends the following grade to the Examination Board:

 PASS
(50-100) FAIL
(0-49)
COMPENSABLE FAIL
(45-49, in case the candidate sits
the examination for the first time)

08 July 2005

... - Chairman of Examination Committee II