

Examiners' Report on Paper B/1994 (Chemistry)

In Paper B the claims had to be restricted severely in view of the prior art cited in the communication. The candidates were expected to identify the subject-matter for which it was still possible to obtain protection. Four different aspects of the application as presented could be maintained: (I) The preparation of the polyglycerol esters (PGE) and (II) conversion of the PGE to fine powder ("spray drying"), (III) a method for making highly expanded edible foam products and (IV) an ice-cream substitute (frozen dessert).

The candidates were expected to accept that there was a lack of unity and that two inventions could be maintained. The first related to the above aspects (I) and (II); the other to the aspects (III) and (IV). The candidates were expected to make up their mind which of the above inventions to pursue in their application. They were also expected to identify the other subject-matter to be pursued in a divisional application and to justify their decision in their response to the office or in an additional note.

Candidates were expected to express their intentions in clear words in order to get full credit for the measures or steps intended. They should not refer to possible steps that might or might not be considered at a later stage. A statement such as "we reserve the right to file a divisional application for subject-matter deleted from the present application" was not considered to be sufficient.

No patentable subject-matter should be abandoned by the candidates. Such abandonment resulted in loss of marks.

Some candidates argued that unity was given due to the particular PGE compounds. The group of compounds as defined in the application and the preferred compounds as used in the examples were, however, anticipated by Documents III and IV. If the only concept common to the different embodiments of the application (e.g. the different categories of claims) has no inventive character then there is lack of unity.

The closest prior art and also the problem to be solved with respect to this closest prior art were different for the two inventions. Thus, Document V was considered to be the closest prior art for aspect (I), and Document IV was considered to be the closest prior art for aspects (III) and (IV). This point will be referred to in more detail with respect to inventive step.

Many candidates dealt correctly with the question of novelty and commented on each of the documents separately to support their arguments for novelty.

However - with respect to inventive step - some candidates argued for an inventive step in a very simple way by stating that since a particular feature was not disclosed in a citation it was not obvious and, hence, the claim was inventive. Such an argument could not gain marks.

Some other candidates only stated that taken together the cited documents did not make obvious the subject-matter claimed. Such an argumentation could not be accepted as satisfactory. The candidates were expected to identify one of the documents as the closest prior art for each of the inventions they decided to pursue further, then to define the problem to be overcome with respect to this closest prior art and finally to argue why the other documents did not contribute to the solution found for this problem. It should have been evident that the problem to be solved could only be defined after a document had been identified to be the closest prior art.

Such an approach would have drawn the candidates' attention automatically to the question of unity referred to above, and it would have led them to the correct answer to that question and it would have formed the basis for the justification of their decision which invention to pursue as well.

A number of candidates correctly identified Document V as the closest prior art for the process claim to the preparation of PGE compounds. The document disclosed in general terms this type of process. The argument that Document V was silent about the yields, whereas the invention provided a process resulting in almost complete conversion, which cannot be taken for granted in chemistry was accepted as a basis for the definition of the problem to be solved by this aspect of the application. Therefore the problem to be solved with respect to the document could be considered to be the improvement of the process (e.g. high yields). None of the other documents provided any suggestion to solve this problem and to arrive at the particular combination of the features defined in the claim.

There was no prior art cited with respect to the process claim to the conversion of the PGE to fine particles. Both claims required however that the Article 84 objection be dealt with.

A number of candidates identified Document IV as the closest prior art, which appeared to be correct with respect to the use of the compounds in food industry. It disclosed an amount of from 4 to 9 wt.% of the emulsifier. The problem to be solved by the food product with respect to Document IV could be related to the increased foaming with less emulsifier.

The application discloses several ranges of amounts of PGE for different purposes. For a sufficient emulsifying effect it requires at least 0.3 wt.%, for obtaining a high degree of expansion and to avoid butter-like consistency an amount of 2 to 5 wt.%. Finally for frozen desserts the application refers to amounts of from 0.5 to 1 wt.%.

As regards foamed products obtainable by means of the PGE emulsifiers the following facts from the other documents had to be taken into account: Document II disclosed a slightly expanded butter-like spread and it disclosed amounts of from 6 to 8 wt.% of PGE. Document III taught that highly foamed products could be obtained with 1.5 to 7 wt.%, preferably with 2.5 to 5 wt.% of PGE.

In view of these facts, a claim to a frozen dessert was expected which included the amounts of the ingredients as specified on page 6 as well as a process claim to the preparation of a topping (edible foam). It was considered essential for these claims that the amounts of the components used therein were specified on the basis of the ranges referred to in the last but one paragraph and that the definition of these amounts was hence delimited from the prior art.

The particular process for the preparation of a topping as disclosed on page 5 and the first paragraph of page 6 could be claimed. In such a process claim, the essential feature was the addition of the vegetable gum after the foam had developed. Based on this fact it was also possible to draw up a product-by-process claim for such an edible foam.

As already indicated with respect to Paper A, the candidates were expected to rely on the information available to them and - as a consequence thereof - to base their arguments on the information in the application as presented in Paper B and on the cited documents. Allegations which could not be supported by

evidence from the facts available in Paper B could not be considered in favour of the candidates. Any argument is bound by the original disclosure, and a mandatory feature or definition cannot be accepted as being preferred. An indispensable requirement to claims was the completeness of the essential features (cf. the Guidelines C-III; 4.4).

In the arguments, the candidates were expected to identify where the basis for the amendments or modifications suggested could be found in the application as presented in Paper B.

A number of candidates did not correctly identify the problem to be solved with respect to the closest prior art but they stuck to the desired result the document aimed at. Thus, they focussed on the low-calorie butter aimed at in Document V only, and they disregarded the fact that there was an indication how to obtain the emulsifiers which happened to include those prepared according to claim 2 of the application.

Some candidates did not realise that the recipe in the example of Document IV included 5 wt.% of PGE and 3.1 wt.% of vegetable gums, based on the total weight, and that the composition disclosed was foamed.

Some candidates were not aware that a different process need not necessarily result in new and inventive products (cf. the Guidelines C-III, 4.7b). Evidence for novelty and inventive step of such a product-by-process claim was deemed necessary.

Some candidates drew up claims to highly foamable mixtures comprising at least 0.3 wt.% of PGE. The first paragraph on page 5 gave only support for a sufficient emulsifying effect but not for high foamability at these very low contents (Art. 123 (2) EPC).

A number of candidates stuck too much to the wording of the claims as presented to them in Paper B. They did not make sufficient use of the disclosure in the description but they limited themselves to modify the claims already on file. Art.123 (3) EPC does not apply to the pre-grant examination procedure.

Reference is again made to the Examiner's Report to Paper A because some candidates intended to define a product by its intended use (cf. the Guidelines C-III, 4.8).

A number of candidates drew up claims with disclaimers. Although novelty can be achieved by a disclaimer there is still the question of inventive step. Disclaimers may not be helpful at all if they deprive the candidate of arguments for inventive step, as it is the case when the examples of the application are excluded by the disclaimer. Thus, in this examination a number of candidates disclaimed the preferred PGE compounds used in the examples of the application in order to meet a novelty objection.

The candidates were expected to comment on all documents on which objections were based in the communication and to present their arguments in support of their new claims as regards these documents. Only those arguments for patentability of a claim could be taken into account which related to features defined in this claim.

Some candidates restricted their product claims to PGE concentrations of e.g. 0.3 to 4 wt.% arguing incorrectly that these claims were supported by the original disclosure, particular claim 1 and the examples on page 5. Comments of

this type were not considered helpful for obtaining marks, neither for the ~~o~~ in question nor for the arguments. Such a feature clearly contravened Art. 123 (2) EPC, because a basis for a limit of 4 wt.% is nowhere to be found in the application as presented. Although this amended range is narrower than the original range of from 0.3 to 5 wt.%, it adds subject-matter (cf. the Guidelines C-VI, 5.4).

**EXAMINATION COMMITTEE I**

Candidate No. ....

Paper B Schedule of marks

Category	Maximum possible	Marks awarded by first examiners		Revision of marks / grade (if any) or marking of further examiners (if appropriate)	
		Exr .....	Exr .....	Exr .....	Exr .....
Claims	24				
Argumentation	24				
Total	48				
Corresponding Grade					

Translation of marks into grades

	Grade
0 - 11	7
12 - 17	6
18 - 23	5
24 - 29	4
30 - 35	3
36 - 41	2
42 - 48	1

**Remarks by examiners** which must be given if both the following requirements are fulfilled:

- (a) the grades awarded by the two first examiners before their discussion differ by two grades or more;
  - (b) the marks awarded by at least one of the two first examiners have been changed during their discussion.
- If marks are revised, brief explanation should be given.

**Sub-Committee for Electricity/Mechanics or Chemistry**

- Sub-Committee agrees on \_\_\_\_\_ marks and grade \_\_\_\_\_
- Sub-Committee does not agree on a grade

**Remarks by Sub-Committee** which must be given where the Sub-Committee does not agree on a grade

Grade recommended to Board by Committee I \_\_\_\_\_

**Remarks by Committee I**

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Chairman of Committee I