

Examiners' Report – B (Ch)

1. This paper deals with a tile glaze, a frit for said tile glaze and with wall tiles on which this glaze can be applied.

Document 1 (D1) belongs to the prior art in the sense of Art. 54 (3) and (4) EPC. It deals with glazed alumina ceramics. It discloses the frit of claim 1 of the application. Document 1 does, however, not disclose the tile glaze of claim 2 of the application.

The most relevant document is document 2 (D2) which takes away the novelty of the frit, the tile glaze and the method claimed in the original application. The frit of the example in D2 is identical to the frit used in example 4 in the application.

2. The paper contains a letter from the client including additional tests which provide a reason for considering that a valuable as well as patentable claim could be made by including the features mentioned on page 4, lines 11-12 of the English version of the paper: "Excellent results ... 60 to 64 wt% SiO₂, 12 to 16 wt% Al₂O₃, 19 to 23 wt% CaO, and 1 to 3 wt% R₂O". These tests show that the use of the preferred frit will enhance the wear resistance and acid resistance over that obtained in D2. These tests thus provide a basis for arguing that a novel and inventive selection has been made over D2.

So the claim directed to the tile glaze (i.e. original claim 2) could usefully be restricted by limiting the ranges for SiO₂, Al₂O₃, CaO, and R₂O as to from 60 to 64 wt% SiO₂, 12 to 16 wt% Al₂O₃, 19 to 23 wt% CaO, and 1 to 3 wt% R₂O, even though example 1 was excluded by this limitation (the frit in example 1 contained 0.5 wt% R₂O).

3. As far as the claim directed to the frit is concerned (i.e. original claim 1), an additional limitation was necessary in order to overcome the novelty objection based on D1.

As D1 is prior art only under Article 54 (3) and (4) EPC it is justified to exclude the frit compositions disclosed the claim of D1 by means of a disclaimer to establish novelty.

As an alternative, novelty in view of D1 could be achieved by defining zirconia to be absent (ZrO₂ : 0 wt% in the frit). The frit according to D1 (see D1, claim 1) contains at least 1 wt% of ZrO₂.

Novelty in view of D1 could also be established by imposing limits in respect of the other optional components, but this would give less protection and gained fewer marks.

Candidates who noted in their answer that they did not disclaim the frit of D1 because they did not deem it admissible under Art. 123 (2) EPC due to decision 0323/97 gained some of the marks awarded to a perfect claim to the frit.

It was not necessary to include in the claims directed to the tile glaze the feature needed to make the frit novel with respect to document D1. The claims to the frit and the tile glaze were still unitary. Candidates whose claims to the glaze contained this additional limitation gained fewer marks for the glaze.

4. In addition to that, a claim directed to the method for producing wall tiles was expected (see original claim 3).
This claim had to include the restrictions of the claim to the tile glaze mentioned above. As the comparative tests filed by the applicant in response to the communication stated that the good results are only obtained if the firing temperature is within the range of from 1170°C to 1220°C (see the disclosure in the paper as originally filed at 6/5-6 of the English version), this range had to be incorporated into said claim.
Finally, a product-by-process claim to the wall tiles was expected.
5. There was little scope for dependent claims in this paper.
6. A maximum of 50 % of the marks in Paper B was awarded to the arguments. A good answer included
 - the basis for all the amended claims under Art. 123 (2) EPC including arguments on the admissibility of any amendments;
 - arguments on novelty including an indication why the selection of narrower concentration ranges rendered the subject-matter of the claims novel (criteria for a selection invention);
 - arguments on inventive step in the form of a problem-solution approach starting from D2 as the closest prior art;
 - the correct presentation to the EPO of the client's letter including the comparative tests;
 - Candidates were expected to recognise that document D1 should not be used when arguing inventive step.

EXAMINATION COMMITTEE I

Candidate No.

Paper B (Chemistry) 2002 - Schedule of marks

Category	Maximum Possible	Marks awarded		Marking by further examiners if any	
		Marker	Marker	Marker	Marker
Claims	50				
Argumentation	50				
Total	100				

Sub-Committee for Chemistry 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)

The Hague, 23 August 2002

I. Harris - Chairman of Examination Committee I