

1. Paper A calls upon a candidate to draft a set of claims and a description for a European patent application. Most of the points were awarded for the independent and dependent claims, but a fifth of the marks were assigned to the description. In some cases, candidates with a reasonable set of claims let themselves down with a rather cursory description.

2. Claims directed to the following subject-matter were expected:

- a process for making synthans by reacting hydroxyaryl sulphones, both condensed and uncondensed polycyclic aromatic sulphonic acids and formaldehyde,
- the products obtainable by this process,
- tanning agents comprising products obtainable by this process,
- a tanning process using the synthans, and
- a retanning or finishing process.

The order of claiming was not critical, as long as all the available categories were covered.

3. The candidates should have realized that for example DI disclosed the general process for making a tanning agent by condensing hydroxyaryl sulphones, a polycyclic aromatic sulphonic acid (i.e. naphthalene sulphonic acid which is a condensed polycyclic aromatic sulphonic acid) and formaldehyde. It was therefore necessary to limit the claims to mixtures of *both* condensed *and* uncondensed acids.
4. The best candidates drew claims which highlighted this essential difference, without unnecessarily limiting the claims with too many specific reaction conditions. A convenient way to stress the difference was by employing the two-part form of claim.

Serious restrictions (for example, a process claim for making the synthans which contained a limitation directed to the preparation of the aromatic sulphonic acid components) resulted in a corresponding loss of marks.

Some candidates appeared to have added restriction upon restriction into their claims in the hope of establishing novelty, without a proper consideration of the real value of the claims they were proposing.

5. Careful attention had to be paid to the way the client expressed the (preferred) reaction conditions. Restrictions of the claims as to the reaction time given on page 16 of the English version of the paper resulted in a small loss of marks, since the indication as to reaction time in the letter from the client is prefaced with the words "in general", which is not limiting. A claim directed to the tanning process, on the other hand, had to be restricted to a pH-range of from 3 to 6 (see page 20, lines 11-12).
6. According to the client's letter (see the bottom of page 12 of the English version) the sulphones are prepared from hydroxyaryl compounds which may be substituted with lower alkyl groups. In the fourth paragraph on page 20 (English version), lower alkyl was defined to comprise up to C₄ alkyl. It was therefore acceptable to define the sulphones as being prepared from hydroxyaryl compounds optionally substituted with alkyl up to C₄. Some candidates also defined the aromatic sulphonic acids as being optionally substituted with alkyl up to C₄. There was, however, no clear basis for this in the client's letter and so this resulted in a small loss of marks.

7. Marks for a reasonable number of dependent claims were awarded to the extent that these claims covered features which were stated to be preferred or advantageous or which presented good fall-back positions. Suitable dependent claims referred to, for example,
- the molar ratios (page 16);
 - the amount of the partly sulphonated phenol (paragraph bridging pages 16 and 18);
 - the subsequent reaction with sulphite and additional formaldehyde (first paragraph on page 18);
 - the reaction temperature and time
 - the concentrated solution or solid form of the product (page 18, third paragraph).
8. Candidates were expected, in the description, to provide a good and clear analysis of the invention. This meant a fairly detailed analysis of the novelty of the invention over each of the cited documents, and a clear indication as to the problem solved, having regard to this prior art, by the distinguishing feature(s). A mere general summary of the prior art documents followed by a vague statement as to the problem addressed by the invention was considered to be insufficient to merit very many marks.

A common fault was a lack of consistency between description and claims. Sometimes the description made incomplete reference to all the kinds of claims the candidate had drafted. Many candidates also included unmodified statements appearing in the client's letter such as "You are not familiar perhaps with the different types of compounds as referred to in our letter". Such statements were inappropriate in the context of a European patent application.

Paper A (Chemistry) 1999 - Schedule of marks

Category	Maximum possible	Marks awarded		Marking by further examiners if any	
		Marker	Marker	Marker	Marker
Independent claims	65				
Dependent claims	15				
Description	20				
Total	100				

Sub-Committee for Chemistry agrees onmarks and grade

	PASS
	COMPENSABLE FAIL
	FAIL

The Hague, 18 August 1999

J. Combeau - Chairman of Examination Committee I