Abstract
The ISA has a duty, where lack of unity has become apparent a posteriori, to carry out a comprehensive search for all the inventions, provided the additional time required is minimal. It is a matter for the ISA to decide whether the time required for a complete search is negligible. Since in the present case the execution of a search, which might be considered comprehensive, presupposes further searches, the Board has no reason to doubt that the ISA exercised its judgment correctly. Thus, the Board denied the protest against the invitation for additional fees.

EPO boards of appeal decisions
Date of decision 27 January 1992

Summary of Facts and Submissions

I. On 12 October 1990 the applicant filed an international application PCT/EP ... with the European Patent Office.

II. On 30 January 1991 the European Patent Office as competent International Searching Authority (ISA) issued, pursuant to Article 17(3)(a) and Rule 40.1 PCT, an invitation to the applicant to pay twelve additional search fees because the application did not comply with the requirement of unity of invention.

In the invitation it is first of all pointed out that the patent application relates to herbicidal combinations of active substances comprising benzyloxcyclohexanedione derivatives (type-A compounds) and one or more of the 19 specific type-B compounds mentioned in Claim 1.

To substantiate the objection of lack of unity it was then stated in the invitation that the idea whereby said combinations might be considered as falling under a single concept - combining benzyloxcyclohexanedione derivatives with other herbicides - was not new. Combinations of herbicidal benzyloxcyclohexanedione derivatives with other herbicides were known from EP-A-230 596 (1) and the publications cited in the description, for example EP-A-186 118 (2), page 26, and EP-A-137 963 (3), page 19. The 19 type-B compounds were accordingly classifiable by structure into 13 different classes whose sole common feature was their herbicidal property. The combinations according to the application were therefore not a group of inventions which, within the meaning of Rule 13.1 PCT, were so linked as to form a single general inventive concept.
The invitation concluded with the classification of the combinations according to the invention into 13 groups of inventions:

1. Combination of compound I with II or III.
2. Combination of compound I with IV.
3. Combination of compound I with V, VI, XI or XII.
4. Combination of compound I with VII or VIII.
5. Combination of compound I with IX.
6. Combination of compound I with X.
7. Combination of compound I with XIII.
8. Combination of compound I with XIV.
9. Combination of compound I with XV.
10. Combination of compound I with XVI.
11. Combination of compound I with XVII.
12. Combination of compound I with XVIII or XIX.
13. Combination of compound I with XX.

III. On 27 February 1991 the applicant then paid six of the requested additional search fees (relating to the ISA's above-defined invention groups 2, 3, 4, 5, 6 and 12) under protest (Rule 40.2(c) PCT), essentially arguing in a reasoned statement that what unified all the claimed compositions, processes of preparation and methods of application was that they contained or made use of a type-A compound combined with one or more further herbicides which all caused a synergistic increase in the activity of the type-A compounds.

In the opinion of the applicant, splitting the invention into subsidiary inventions, as demanded by the ISA, would lead to an incomplete search, since herbicidal compositions comprising combinations of type-A compounds and a plurality of the type-B compounds would no longer be included.

Reasons for the Decision
1. The protest is admissible.

The applicant has paid only six of the twelve requested additional search fees, for the invention groups 2, 3, 4, 5, 6 and 12, as defined by the ISA; no additional fee was paid for any of the invention groups 7, 8, 9, 10, 11 and 13. Therefore the only issue to be examined by the Board in the present case is whether or not the invitation is justified in respect of the additional search fees paid.

2. As is evident from point II above, the ISA has based the objection of lack of unity on document (1) cited in the search report. The ISA further cited two other documents which are mentioned in the present PCT application, documents (2) and (3). The ISA is in particular of the view that the idea whereby the combinations in question might be grouped together under a single concept, that of combining benzoylcyclohexanedione derivatives with other herbicides, is no longer new, since such combinations are known from the cited state of the art. The present application therefore did not relate to a group of inventions which, within the meaning of Rule 13.1 PCT, were so linked as to form a single general inventive concept.

As is readily apparent, in the present case the objection of lack of unity of the invention was only raised a posteriori.

3. In decision G 1/89 of 2 May 1990 (see OJ EPO 1991, 155) the Enlarged Board of Appeal observed, inter alia, that the ISA is entitled, when determining whether or not an international patent application complies with the requirement of unity of invention, also to consider the question of novelty and of inventive step compared with the state of the art (non-unity a posteriori). The Enlarged Board of Appeal emphasised that if the ISA, when forming such a view of the novelty and the inventive step, arrives at the consideration that the international application lacks unity, it may only be regarded as a provisional opinion; the consideration has only the procedural effect of initiating the special procedure laid down in Article 17 and Rule 40 PCT and is therefore not a substantive examination in the normal sense of that term (Reasons for the Decision, point 8.1).

4. The present application relates to herbicidal compositions, characterised by an effective content of one or more compounds of the general formula (I) or salts thereof (type-A compounds)
5. Of the documents mentioned in the ISA's invitation, the Board is of the view that document (1) comes closest to the claimed subject-matter, since this prior art describes synergistically active herbicidal compositions comprising ... 

Against the background of document (1), therefore, the problem for a person skilled in the art was to find further alternatives for the aforedescribed synergistically active herbicidal compositions.

As a solution to this problem Claim 1 of the present application claims a combination of a herbicide of the series of the benzoylcyclohexanone derivatives with at least one of the compounds (II) - (XX).

6. Although documents (2) and (3) cited in connection with the present application do not expressly describe synergistically active combinations of herbicides, it is none the less the view of the Board that at least some of the herbicidal compositions now claimed are anticipated there, since to solve the above-stated problem it is merely necessary to combine certain herbicidal compounds with one another. This is because the two documents describe not only a multiplicity of benzoylcyclohexanone derivatives (I) according to the invention, but also a series of other herbicides which are proposed for use in combination with the former, for example 2-benzothiazol-2-yl oxy-N-methyl-acetanilide and S-ethylhexahydro-1H-azepine-1-carbothioate (see document (2), Claim 1 and page 26, lines 6 and 18/19; document (3), Claim 1 and page 19, lines 6 and 18/19). The latter correspond to compounds (X) and (V) according to the invention. The combinations of compounds (I) with (V) or (X) claimed in the present case are thus clearly known from documents (2) and (3) respectively. It is therefore immaterial that this partial anticipation of the subject-matter of the application was something of a matter of chance.

However, in the present case this finding of itself has no repercussions on the question of unity of the invention, since it merely shows that some of the claimed solutions are no longer new. Yet it certainly does not follow automatically that the subject-matter of the application is not based on a single general inventive concept. This is because in the course of the later substantive examination the applicant can for example remedy the objection of lack of novelty by restricting the subject-matter of the application by suitable measures compared with the novelty-destroying state of the art (cf. W 5/85 of 21 March 1986, in particular point 10 of the Reasons for the Decision, and W 10/89 of 27 September 1991, in particular point 6 of the Reasons).

7. As is clear from points 4 and 5 above, the solution according to the invention consists in a series of combinations of herbicides which, owing to their equivalence with the closest state of the art, represent pure alternatives to it.
Since, however, the skilled person seeking a solution already knew from document (1) that a benzoylcyclohexanedione derivative could be used as the fixed or invariant constituent of a synergistic herbicidal composition, his task was therefore chiefly to find other second compounds than those already known. It is not inconceivable that he would have been able to find a number of compounds which because of their structural similarity would have formed a single family of compounds so that the solution to the problem could have consisted of merely a single alternative. However, the search uncovered not compounds of a certain type which the person skilled in the art could locate within a single specific family or class of chemical compounds but - as was pertinently noted by the ISA - a not inconsiderable number of compounds which, owing to appreciable structural differences, fall into no fewer than thirteen completely independent groups or classes of compounds. This was not disputed by the applicant in his protest. In these circumstances, however, there can be no question of a unitary solution to the problem. On the contrary, in the present case there is a juxtaposition of no less than thirteen completely independent solutions which are totally unrelated to one another. There is accordingly no evidence of a single general inventive concept.

8. The above observations also make it clear that a comprehensive search must go further than merely searching for compounds of type A. A comprehensive search must consequently also involve further specific searches for publications concerning compounds of type B. In these circumstances the Board does not see why the ISA, apart from the invention first mentioned in the claims (invention group 1), should have searched in full all the additional inventions claimed.

As is clear from the PCT guidelines, the ISA has a duty, where lack of unity has become apparent a posteriori, to carry out a comprehensive search for all the inventions, provided the additional time required is minimal, in particular when the inventions are very similar from the aspect of the inventive concept and none of them requires searches in additional classification units. Whether these preconditions are fulfilled in a particular case is a question of fact. On this point the Board would comment as follows:

Under the Patent Cooperation Treaty (PCT), the International Searching Authority (ISA) is also responsible, when carrying out international searches, for classifying the international applications searched by it (see Rule 43.3 PCT). Accordingly, the ISA plainly has extensive knowledge of the documentation to be employed, which according to the PCT must be properly arranged for search purposes (see Article 15(4) in conjunction with Rules 34 and 36 PCT). The ISA is therefore the competent body to judge which classification units are reasonably to be employed for the international search. This explains why, under the PCT guidelines, it is a matter for the ISA to decide whether or not the time
required for a complete search is negligible (see Chapter VII, paragraph 12, of the PCT guidelines). Since in the present case the execution of a search which might be considered comprehensive presupposes further searches, the Board has no reason to doubt that the ISA exercised its judgment correctly.

In these circumstances, furthermore, the ISA is not open to the criticism that its subdivision of the invention led to an incomplete search. On the contrary, the incomplete search is a result of the demonstrated lack of unity of the invention and of the resulting multiplicity of subject-matters, which require more than one search.

9. In conclusion the Board considers that, contrary to the applicant's view, the invention groups 2 to 6 and 12 according to the application do not constitute a unitary invention. The ISA was accordingly right to issue an invitation to pay additional search fees for each of these subject-matters.

ORDER

For these reasons it is decided that:

The protest under Rule 40.2(c) PCT is dismissed.