

EW0001.97

**Decision of Technical Board of Appeal 3.3.4 dated
15 November 1997**

W 1/97 - 3.3.4

(Language of the proceedings)

Composition of the board:

Chairman: U. M. Kinkeldey

Members: F. L. B. Davison-Brunel

R. Teschemacher

Applicant: PROMEGA CORPORATION

Headword: Tandem repeat loci/PROMEGA

Article: 17(3)(a) PCT

Rule: 13, 40 PCT

Keyword: "Lack of unity" - "Multiple request for search fees"

Headnote

An invitation of the International Searching Authority to pay additional fees must identify the separate inventions and indicate the amount to be paid. The search report has to cover those separate inventions identified in the invitation for which additional fees have been paid. The PCT does not give a legal basis for successive invitations to pay additional search fees.

Summary of facts and submissions

I. The applicants filed an international patent application PCT/US95/12608 with 25 claims. Claims 1, 23 and 24 read as follows:

"1. A method of simultaneously determining the alleles present in at least two loci from one or more DNA samples, comprising:

a. obtaining at least one DNA sample to be analyzed, wherein the DNA sample has at least two loci which can be amplified together;

b. amplifying the short tandem repeat sequences in the DNA sample; and

c. evaluating the amplified fragments to determine the alleles present at each amplified locus within the DNA sample."

"23. A method of simultaneously determining the alleles present in at least two loci from one or more DNA samples, comprising:

a. identifying an appropriate set of loci and primers which provide non-overlapping alleles;

b. obtaining at least one DNA sample to be analyzed, wherein the DNA sample has at least two loci which can be amplified together;

c. amplifying the short tandem repeat sequences in the DNA sample; and

d. evaluating the amplified fragments to determine the alleles present at each amplified locus within the DNA sample."

"24. A kit for simultaneously analyzing short tandem repeat sequences in at least two loci from one or more DNA samples, comprising:

a. a container containing oligonucleotide primer pairs for each of the specified loci;
and

b. instructions for use."

Claims 2 to 6, 9, 10, 14 which were directly dependent on claim 1 related to certain embodiments of the loci. Claims 7 and 8 were directly or indirectly dependent on claim 6 and related to certain embodiments of the primers. Claims 11 to 13 and 16 were directly or indirectly dependent on claim 10 and related to certain embodiments of the primers. Claims 15 and 17 to 22 which were directly dependent on claim 1 related to certain features of the method. Claim 25 which was dependent on claim 24 related to certain embodiments of the primers.

II. On 20 March 1996, the EPO, acting as an International Search Authority (ISA) sent to the applicants an invitation to pay one additional search fee pursuant to Article 17(3)(a) and Rule 40.1 PCT.

In the invitation, the ISA stated that the problem underlying the present application was to provide further methods for the simultaneous determination of STR alleles of a plurality of groups of STR loci. The solution provided was to simultaneously use multiple combinations of primers corresponding to the different loci.

The simultaneous determination of alleles of multiple STR loci (including groups containing one of the loci claimed) using combinations of primers had already been

achieved as for example in Am.J.Hum.Genet., vol. 55, 1994, 175-179. There were no special technical features linking the presently claimed primers. Therefore, there was no single inventive concept underlying the plurality of inventions.

The ISA divided the invention into two groups:

1. Claims 1, 6 to 8, 10 to 13, 15, 17 to 24 (complete), 2 to 4, 16 and 25 (partly):

A method for simultaneously determining Short Tandem Repeat (STR) alleles from multiple loci in general and for groups containing at least the HUMCSF1PO loci in particular as well as primers and kits used in this method.

2. Claims 5, 9 and 14 (complete), 2 to 4, 16 and 25 (partly):

Methods for simultaneously determining Short Tandem Repeat (STR) alleles from multiple loci for groups of loci not containing the HUMCSF1PO as well as kits for this method.

The ISA further remarked that this second set of claims contained a plurality of different groups of loci to be simultaneously tested and consequently a plurality of further inventions but considered itself unable to further subdivide this group of inventions and left the initiative for such further subdivision to the applicants.

III. The applicants paid the additional fee under protest pursuant to Rule 40.2(c) PCT. The arguments, they submitted in support of the protest were as follows:

All of the claimed loci were of a similar nature in that they all belonged to an art-recognised class of chemical compounds, the STR loci, which shared the structural property of being short tandem repeat. The special technical feature linking them was their common ability to provide discernible and non-overlapping bands in gel electrophoresis.

IV. On 22 July 1996, the Review Panel of the ISA confirmed the finding of lack of unity and invited the applicant to pay a protest fee.

V. On that same date, the ISA sent to the applicant a further invitation to pay one additional search fee, the invention being then divided into three groups.

VI. On 21 August 1996, the applicants paid the required search and protest fee.

VII. On 12 November 1996, the ISA sent to the applicants a further invitation to pay six additional search fees, the invention being then divided into nine groups.

VIII. One additional search fee was paid by the Applicant.

Reasons for the decision

The protest

1. The protest is admissible.

2. According to Rule 13.1 PCT, the international patent application shall relate to one invention only or to groups of invention so linked as to form a single general inventive concept. As stated in decision G 1/89 (OJ EPO 1991,155), the ISA is empowered to raise an objection for lack of unity a posteriori i.e. after having taken the prior art into consideration. An objection of this kind can only be based on a provisional opinion on novelty and inventive step which is in no way binding upon the authorities subsequently responsible for the substantive examination of the application (see point 8.1 of the grounds for the decision).

3. The invitation by the ISA to pay one additional fee cites the document Am.J.Hum.Genet., vol. 55, 1994, 175-189 as detrimental for the novelty of the subject-matter of claims 1 and 2.

4. This prior art document discloses the evaluation of 13 STR loci for use in personal identification applications. On page 176, it is stated that "standard sets of three loci were routinely analyzed in balanced triplex reactions. Concentrations of the balanced triplexes were determined experimentally". The loci are chosen from a group comprising HUM13A01 and HUMFESPS. A preferred combination of three loci to be tested consists in at least HUMCSF1PO and HUMTH01 together with a third locus.

5. The Board carried out a provisional examination on novelty of claims 1, 2 and 3 and comes to the conclusion in the light of the above teachings that the method of claim 1, its use with the HUM13A01 and HUMFESPS in claim 2, and with the combination of at least HUMCSF1PO and HUMTH01 in claim 3 were already known at the filing date.

6. According to Rule 13.2 PCT, the requirement of unity of invention shall be fulfilled only when there is a technical relationship amongst the inventions involving one or more of the same or corresponding special technical features. The expression "special technical features" shall mean those technical features that define a contribution which each of the claimed inventions, considered as a whole, **makes over the prior art** (emphasis added).

7. In the reasoned statement accompanying the protest, the applicants argued that the requirements for unity of invention were fulfilled because the claimed loci constituted a "Markush group" with all elements of the group sharing the special technical feature that they provided separate discernible and non-overlapping bands in gel electrophoresis.

8. As stated in paragraph 4, the claimed method and its use to evaluate some of the loci of claim 2 and their combination in claim 3 are already known from document (1). Thus, whichever technical feature the claimed loci may share, it cannot be considered as a "special technical feature" within the meaning of Rule 13(2) PCT, because it does not make a contribution over the prior art.

9. Thus, on the basis of the facts and submissions on file, at this stage of the proceedings, non-unity a posteriori has to be assumed.

The invitations to pay further search fees dated 22 July 1996 and 12 November 1996

10. During the pending procedure on the applicants' protest concerning the first invitation to pay an additional search fee, the ISA sent a second and a third invitation to pay further additional search fees. These invitations are only valid if the relevant provisions provide a legal basis for further invitations. The Board can see no such basis.

11. Although Article 17(3)(a) and Rule 40 PCT do not deal expressly with the question whether a series of successive invitations is possible, the matter is covered by the PCT Search Guidelines (PCT Gazette 1992, 14025) which are binding on the EPO acting as ISA under Article 2 of the Agreement between the EPO and WIPO under the PCT dated 7 October 1987 (OJ EPO 1987, 515; for the Boards of Appeal see G 1/89, OJ EPO 1991, 155, Reasons 6). According to Chapter VII, 2, 2nd sentence, of these Guidelines the invitation to pay additional fees "must identify the separate inventions and indicate the amount to be paid". This has to be seen in connection with the provision that the search report has to be made on those parts of the international application for which additional search fees have been paid (same paragraph close to the end). This means that the search report has to be

made on those separate inventions identified in the invitation for which additional fees have been paid. This system excludes that further separate inventions are identified in a later stage of the proceedings for the purpose of collecting further search fees. The PCT Search Guidelines repeat the above general requirements expressly for the situation of an a posteriori finding of non-unity (Chapter VII, 10), stating even more clearly that the number of additional search fees to be paid has to be indicated.

12. The obligation of the ISA to identify in the first and only invitation the separate inventions for which the applicant has to pay additional fees in order to receive a complete search report serves the purpose to give the applicant a sound basis for his decision whether the payment of the additional fees is in his interest. Such a basis is only given if he knows what he gets for the fees to be paid.

13. It is true that the ISA may not have a complete basis for assessing unity in every respect until the search has been made. For the purpose of the search, unity can anyway be assessed only on a provisional basis since substantive examination is not within the competence of the ISA and charging additional fees should be made only in clear cases (G 1/89, above, Reasons 8). Such a clear case does apparently not exist if the ISA, having already searched part of the subject-matter, is still not in a position to identify several separate inventions.

14. Within the present system under the PCT it is not possible to use the final search result as a basis for charging additional fees. On the contrary, the invitation to pay additional search fees has to be sent before the search report is established. This implies that the result of the search on those parts of the international application for which fees have been paid may entail a posteriori objections of non-unity not considered in a previous invitation to pay additional search fees. In addition, the ISA is obliged to establish the international search report within three months from receipt of the search copy or nine months from the priority date (Rule 42.1 PCT).

This leaves in most cases no time for successive invitations to pay additional search fees on the basis of the result of the search at the time of each invitation.

15. As the present case illustrates, successive invitations to pay additional search fees can have the consequence that the question of unity of invention becomes pending at three instances at the same time: the protest for the first invitation may be pending before the Board of Appeal when at the same time the Review Panel of the ISA is faced with a further protest against the second invitation and the Search Division is still issuing further invitations on the basis of the search results obtained meanwhile. This would be in conflict with basic principles of procedural law which apply also in protest cases (cf W 53/91, dated 19 February 1992, not published). Once a protest is filed, the EPO acting as ISA remains competent only for the prior review of the justification of the invitation already issued (Rule 40.2(e) PCT). It is not entitled to raise the question of non-unity a second or even further times in the same search procedure. This would be detrimental to the right of a party to have one and the same case be decided in one proceeding, and not to be forced to seek legal redress in respect of the same case in several proceedings. It would also disregard the fact that the position to be taken by the Board of Appeal in its decision on the protest may become prejudicial for any further finding of non-unity.

16. The ISA may find it appropriate, as in the present case, to address the applicant and invite him to suggest how he would group separate inventions. As follows from the preceding, this can, however, only be done before the invitation under Rule 40 PCT is sent. When sending the invitation, the ISA must have come to a conclusion for which separate inventions additional search fees are charged.

Order

For these reasons it is decided that:

1. The protest is dismissed.
2. The additional search fees paid in connection with the invitations by the ISA dated 22 July 1996 and 12 November 1996 shall be reimbursed.