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Boards of Appeal

Chambres de recours

Case Number : W 06/89

International Application No PCT/US 88/02153

D E C I S I O N
of the Technical Board of Appeal 3.4.1
of 21 April 1989

Applicant : TECHNICON INSTRUMENTS CORPORATION
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U.S.A.

Representative : James J. Romano Jr.
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Subject of this decision: Protest according to Rule 40.2(c) of
the Patent Cooperation Treaty made by
the applicants against the invitation
(payment of additional fee) of the
European Patent Office (branch at The
Hague) dated 11.11.1988

Composition of the Board :

Chairman : K. Lederer

Members : C. Black

C.V. Payraudeau

Summary of Facts and Submissions

- I. The applicant filed international patent application PCT/US88/02153 at the United States Patent and Trade Mark Office.
- II. 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 pay two additional search fees because it considered that the application did not comply with the requirement of unity of invention (Rule 13.1 PCT).
- III. The application concerns an apparatus and a method for the separation and/or formation of immiscible liquid streams on a continuous flow basis, and an apparatus and method of automatic analysis embodying the said separation and formation.
- IV. The ISA identified three different inventions as follows:
 1. Claims 1-15, 32-40, 54 and 56 relating to an apparatus/method for separating the liquids.
 2. Claims 16-18, 41-50, 55 and 57 relating to an apparatus/method for introducing liquid into the liquid stream.
 3. Claims 29-31, 51-53 relating to an apparatus/method for analysis of the liquid streams.

It was argued that because of the lack of overlapping independent claims, the claims indicated several formally independent inventions, and Claims 29 and 51 were referred to specifically.

- V. Within the prescribed time limit, the applicant paid both additional search fees under protest in accordance with Rule 40.2(c) PCT and requested refund of both additional search fees, or as an auxiliary request, refund of one of these fees. In support of the first request he argues that Claims 29 and 51 define a common inventive concept, namely the formation and subsequent separation of immiscible liquid streams and in effect that they contain the same features relating to said formation and separation. Moreover, Claims 29/51 "overlap" (using the wording of the ISA) all other claims, each of which is directed to a novel and non-obvious aspect of the common inventive concept. Further, in searching the subject-matter of Claims 29/51 the same prior art would of necessity be searched as for the remainder of the claims. In support of the auxiliary request he contends that a search of the group 1 claims and a search of the group 2 claims would each of necessity cover the group 3 claims.

Reasons for the Decision

1. Pursuant to Article 154(3) EPC the Boards of Appeal of the EPO are responsible for deciding on protests made by an Applicant against an additional search fee charged by the EPO under the provisions of Article 17(3)(a) PCT.
2. The Protest complies with Rule 40.2(c) PCT and is therefore admissible.
3. Although the ISA in referring to "lack of overlapping claims", specifically mentioned Claims 29 and 51, it also grouped these together in invention group 3. Therefore the reference was either made in error or, more likely, was

intended to exemplify claims which did have unity of invention. Claims 29 and 51 belong to the combination singled out in Rule 13.2(ii) PCT as being permissible under Rule 13.1 PCT. They contain substantially the same features, the wording being adapted to an apparatus and a process claim respectively, therefore there is no doubt that there is unity of invention between the subject-matter of these claims.

4. The invitation to pay additional search fees is considered to meet the requirements of Rule 40.1 PCT because the reasoning of the ISA, although brief, is sufficient for the Board to understand why the ISA considers that the application relates to three inventions and was apparently so for the Applicant. As will be shown, however, the Board does not agree with the conclusion arrived at by the ISA.
5. Of the three invention groups identified by the ISA (see paragraph IV above), group 3 contains independent apparatus Claim 29 and method Claim 51 which have been considered in paragraph 3 above. Group 1 contains independent apparatus Claims 1 and 54 of very similar scope to each other and corresponding respective independent method Claims 32 and 56. Group 2 contains independent apparatus Claims 16 and 55, again of very similar scope, and corresponding respective independent method Claims 41 and 57. The Board is satisfied that within each of groups 1 and 2 there is unity of invention between corresponding apparatus claims and method claims for substantially the same reasons as given for Claims 29 and 51 in paragraph 3. Therefore, what has to be investigated is the presence or absence of unity of invention between groups 1, 2 and 3.
6. In arguing the lack of overlapping claims what the ISA seems to be saying is that if there is no overlap at all there will clearly be no unity of invention, if there is

complete overlap there will be unity and that somewhere between the two extremes is the dividing line between unity and non-unity. This does not appear to be a very satisfactory method, as regards ease of application, of investigating the question of unity of invention since it presupposes that it is possible always to identify the location of the said dividing line. This will vary from case to case and the criteria for determining the location will be different in a highly worked field from those in a newly opened one. Further establishing what is a required degree of overlap does not appear to be a substitute for, or equivalent to, identifying a single general inventive concept.

7. In the present case this requires having recourse to the description, from which the problem underlying the present application can be seen to be as follows. It is known to use a hydrophobic isolation liquid to encapsulate successive aqueous sample liquids to minimise sample liquid carryover in the course of sample liquid analysis. It is also known to use, for transporting the liquid stream, a conduit having a hydrophobic inner surface which is accordingly preferentially wetted by the hydrophobic liquid. A problem with known methods or apparatus is apparently that the separation of the sample liquid from the isolation liquid relies on difference in specific gravity; the two liquids however remain at the same location with the possibility of interference of the isolation liquid with sample liquid analysis or further processing. This problem is solved, according to invention group 1, in that a separating means in the conduit separates at least a portion of one liquid from the other as the liquid stream flows past the separating means and the said separated portion flows out of the conduit while the remaining liquid stream flows on through the conduit. Now the constituents of the liquid stream have first of all

to be brought together and according to invention group 2 this is achieved by a method, and corresponding apparatus, which is substantially the method and apparatus of group 1 working in reverse. This appears to the Board to be a logical or common-sense addition to or modification of invention group 1. Invention group 3 combines groups 1 and 2 in a sample liquids analysis apparatus and method.

8. Accordingly, there is a single general inventive concept linking invention group 1, 2 and 3, that is, the combination of the conduit having a hydrophobic inner surface and means in said conduit for continuously introducing one constituent of a liquid stream into the other and/or means in said conduit for continuously separating at least part of one constituent of the liquid stream from the other, the means for introducing being substantially the reverse of the means for separating.
9. In concluding that the application does not lack unity of invention the Board has not been influenced by the Appellant's argument that a search of invention group 3 would have required the same prior art to be searched as a search for group 1 and 2 since this is not a criterion for unity of invention, although it would be taken into consideration in the situation referred to in the Guidelines for International Search to be carried out under the PCT, Chapter VII. 12.

Order

For these reasons, it is decided that:

1. The invitation to pay additional fees is set aside.
2. The refund of the two additional fees paid is ordered.

The Registrar:

The Chairman:

F.Klein

K.Lederer