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**Datasheet for the decision  
of 26 June 2009**

**Case Number:** T 0384/08 - 3.3.04

**Application Number:** 94200059.7

**Publication Number:** 0619321

**IPC:** C07K 1/04

**Language of the proceedings:** EN

**Title of invention:**

Method and apparatus for investigating polynucleotide or amino acid sequences

**Patentee:**

Affymetrix, Inc. (a Delaware Corporation)

**Opponents:**

- (02) Metragen, Inc.  
(03) Multilyte Ltd.

**Headword:**

Method for investigating/AFFYMETRIX

**Relevant legal provisions:**

EPC Art. 106(2), 123(2)(3)

**Relevant legal provisions (EPC 1973):**

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**Keyword:**

"Transfer of opponent status - refused by first instance - *res judicata* (no) - prohibition of *reformatio in peius* (not applicable) - transfer accepted"

"Added subject-matter - main and auxiliary requests 1 to 4 (yes)"

"Extension of scope - fifth auxiliary request (yes)"

**Decisions cited:**

G 0004/88, G 0009/92, G 0003/97, G 0002/04, T 0289/91,  
T 0898/91, T 0327/92, T 0659/92, T 0028/93, T 0401/95,  
T 0960/95, T 0799/97, T 0149/02, T 1178/04

**Catchword:**

See points 1 to 10 of the Reasons.



Case Number: T 0384/08 - 3.3.04

**D E C I S I O N**  
of the Technical Board of Appeal 3.3.04  
of 26 June 2009

**Appellant:**  
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**Decision under appeal:**            **Decision of the Opposition Division of the European Patent Office posted 8 November 2007 revoking European patent No. 0619321 pursuant to Article 102(1) EPC 1973.**

**Composition of the Board:**

**Chair:**                    U. Kinkeldey  
**Members:**                B. Claes  
                              R. Moufang  
                              D. S. Rogers  
                              R. Gramaglia

## Summary of Facts and Submissions

- I. The appeal lies from the decision of the opposition division to revoke European patent No. 0 619 321 entitled "Method and apparatus for investigating polynucleotide or amino acid sequences" which was based on European patent application 94200059.7 and had been granted with 12 claims.

Claim 1 of the patent as granted read:

"1. A method of investigating by receptor/ligand binding a polynucleotide or amino acid sequence by the use of a substrate with a surface, **said surface comprising at least  $10^3$  predefined regions**, said predefined regions containing different nucleotide or amino acid sequences thereon, said predefined regions each occupying an area of less than about  $2.5 \times 10^{-3} \text{ cm}^2$ , which method comprises labelling said sequence being investigated and identifying which of said different sequences binds with said sequence being analysed."  
[emphasis added by the board]

- II. The patent application was filed as a divisional patent application pursuant to Article 76 EPC 1973 deriving from earlier European patent application 90909187.8 which originated from international patent application PCT/NL90/00081 published as WO90/15070.

Claim 25 of the application as originally filed read:

"25. A substrate for screening for biological activity, said substrate comprising  $10^3$  or more different ligands,

optionally  $10^4$  or more, on a surface thereof in predefined regions."

- III. The opposition division decided *inter alia* that the subject matter of claim 1 of the main request (patent as granted) and auxiliary request 1 before it did not comply with the requirements of Article 123(2) EPC with respect to the feature "said surface comprising at least  $10^3$  predefined regions" and that auxiliary request 2 before it did not comply with the requirements of Articles 84 and 123(3) EPC. The opposition division furthermore decided not to accept the requested transfer of opponent status from the original opponent 02 Protogene Laboratories, Inc. (hereafter "Protogene") to Metrigen, Inc. (hereafter "Metrigen") because it considered that the Asset Purchase Agreement of 20 December 2002 between these corporations did not amount to a transfer of Protogene's business or of a specific part of it, but merely to a transfer of certain assets.
- IV. A notice of appeal and a statement of grounds was filed by the patent proprietor (appellant). The latter was accompanied by a main request (the patent as granted) and three auxiliary requests.
- V. Both respondents I and II (opponents 02 and 03, respectively) filed responses to the appeal, opponents 01 and 04 having withdrawn their oppositions already in the first instance proceedings.
- VI. In a communication dated 30 January 2009, annexed to the summons to oral proceedings, the board expressed its preliminary and non-binding opinion on substantive

issues of the claims of the submitted requests. It furthermore noted that it had doubts whether the opposition division had come to the correct conclusion concerning the requested transfer of the status of opponent 02 (respondent I).

- VII. With a letter dated 24 April 2009, respondent I submitted further arguments.
- VIII. With a letter dated also 24 April 2009, the appellant filed a new main request and four auxiliary requests.

Claim 1 of these respective requests read as follows:

Main request

"1. A method of investigating by receptor/ligand binding a polynucleotide or amino acid sequence by the use of a substrate with a surface, **said surface comprising at least  $10^3$  predefined regions**, said predefined regions containing different nucleotide or amino acid sequences thereon, said predefined regions being present at a density of greater than  $10,000$  per  $\text{cm}^2$  and each occupying an area of less than  $10,000 \mu\text{m}^2$ , which method comprises labelling said sequence being investigated and identifying which of said different sequences binds with said sequence being analysed." [emphasis added by the board]

Auxiliary request 1

"1. A method of investigating by receptor/ligand binding a polynucleotide or amino acid sequence by the use of a substrate with a surface, **said surface**

**comprising at least  $10^3$  predefined regions**, said predefined regions containing different nucleotide or amino acid sequences thereon, said predefined regions being present at a density of greater than 10,000 per  $\text{cm}^2$  but not more than 1,000,000 per  $\text{cm}^2$  and each occupying an area of less than 10,000  $\mu\text{m}^2$  but not less than about 100  $\mu\text{m}^2$ , which method comprises labelling said sequence being investigated and identifying which of said different sequences binds with said sequence being analysed." [emphasis added by the board]

Auxiliary request 2

"1. A method of investigating by receptor/ligand binding a polynucleotide or amino acid sequence by the use of a substrate with a surface, **said surface comprising at least  $10^3$  predefined regions**, said predefined regions containing different nucleotide or amino acid sequences thereon, said predefined regions each occupying an area of less than 10,000  $\mu\text{m}^2$ , which method comprises labelling said sequence being investigated and identifying which of said different sequences binds with said sequence being analysed." [emphasis added by the board]

Auxiliary request 3

"1. A method of investigating by receptor/ligand binding a polynucleotide or amino acid sequence by the use of a substrate with a surface, **said surface comprising at least  $10^3$  predefined regions**, said predefined regions containing different nucleotide or amino acid sequences thereon, said predefined regions



each occupying an area of less than 10,000  $\mu\text{m}^2$  but not less than about 100  $\mu\text{m}^2$ , which method comprises labelling said sequence being investigated and identifying which of said different sequences binds with said sequence being analysed." [emphasis added by the board]

Auxiliary request 4

"1. A method of investigating by receptor/ligand binding a polynucleotide or amino acid sequence by the use of a substrate with a surface, **said surface comprising at least  $10^3$  predefined regions**, said predefined regions containing different nucleotide or amino acid sequences thereon, said predefined regions each occupying an area of between about 10x10  $\mu\text{m}$  and 500x500  $\mu\text{m}$ , which method comprises labelling said sequence being investigated and identifying which of said different sequences binds with said sequence being analysed." [emphasis added by the board]

IX. On 25 and 26 June 2009, oral proceedings took place before the board. During these oral proceedings the appellant filed an auxiliary request 5.

Claim 1 of this auxiliary request 5 read:

"1. A method of investigating by receptor/ligand binding a polynucleotide or amino acid sequence by the use of a substrate with a surface, said surface having at least  $10^3$  different nucleotide or amino acid sequences thereon within predefined regions, said predefined regions **being distinguishable by their biological activity resulting from uniformity of**

**sequence measured by binding with a selected ligand or receptor**, and each occupying an area of less than 10,000  $\mu\text{m}^2$ , which method comprises labelling said sequence being investigated and identifying which of said different sequences binds with said sequence being analysed." [emphasis added by the board]

The appellant furthermore submitted the following questions to be referred to the Enlarged Board of Appeal:

"(1) Does Article 106(2) mean that if proceedings for a party are terminated by a first instance, that an appeal can be taken from that part of the decision, even if the decision did not make termination a separately appealable matter?

(2) If the decision in question (1) resulted in revocation of the patent does this affect the answer to question (1) insofar as the terminated party was an opponent?

(3) Does a Board of Appeal have an ex officio duty to review the status of a purported transfer of an opposition even in a case where it is a finding of ineffectiveness of that purported transfer which is at issue and where the putative transferee has itself failed to appeal?"

X. The submissions of the appellant, in as far as they are relevant for the present decision, can be summarised as follows:

*Transfer of the status of opponent 02 from Protogene to Metrigen*

- Since the transfer of opponent 02's status was not accepted by the opposition division and since neither Protogene nor Metrigen appealed the decision, this issue remained finally determined. The board was therefore precluded from examining the transfer of opponent status. Deciding the issue differently from the opposition division would infringe the principle of prohibition of *reformatio in peius*. The circumstances of the case were similar to those underlying the decision T 898/91 of 18 July 1997. There the board had come to the conclusion that the opponent whose opposition was held inadmissible should have appealed that part of the decision if it wished to remain party to the appeal proceedings. In the absence of such an appeal, that part took full legal effect and was not touched by the suspensive effect of the patent proprietor's appeal.
  
- Protogene did not transfer to Metrigen the relevant business in the interest of which the opposition was filed. At the time when the Asset Purchase Agreement was executed, there were no business activities of Protogene any more. An auction had already taken place on 1 November 2001 relating to the entirety of Protogene's business facility. Thereafter there was no longer any relevant business to sell. Furthermore, according to the Agreement only certain assets of the business were transferred. Most of the liabilities of the seller's business remained with the seller.

No employees of the business were transferred. It was irrelevant that the Agreement explicitly referred to Protogene's opposition against the patent in suit. Its purported transfer was ineffective.

*Main request and auxiliary requests 1 to 4*

*Feature: "... said surface comprising at least  $10^3$  predefined regions ..."*

*Added matter - Article 123(2) EPC*

- Although the contentious feature did not have a literal word to word basis in the application as originally filed, a basis could be found in claim 25 as originally filed, which was identical to claim 38 contained in the parent application as originally filed and which related to a substrate comprising  $10^3$  or more different ligands on a surface thereof in predefined regions.
  
- The patent application disclosed on page 28, line 28 to line 33, that a single substrate might support more than about  $10^3$  different monomer sequences. On the same page, lines 33 to 36 the application then states that it was preferred that the sequence be substantially pure, a notion which in turn was defined on page 14 of the application as filed.
  
- The application disclosed that only according to certain embodiments were several sequences intentionally provided within a single region

(page 29, lines 4 to 8). The other embodiments had thus only one sequence in a single region. Therefore,  $10^3$  monomers equated to  $10^3$  predefined regions, providing a clear disclosure of the necessary ratio of 1:1 monomers vs. predefined regions.

- Accordingly, the application clearly and unambiguously disclosed at least  $10^3$  different monomer sequences on a single substrate, each one of which was provided within a predefined region without any of the other  $10^3$  or more different monomer sequences present within the same predefined region.

*Auxiliary request 5*

*Extension of protection - Article 123(3) EPC*

- The amendment in claim 1 that the predefined regions are "distinguishable by their biological activity resulting from uniformity of sequence measured by binding with a selected ligand or receptor" is derived from claim 25 as originally filed, and from the passage on page 28, lines 33 to 36, disclosing the provision of substantially pure monomer sequences on the surface of the substrate and from the definition of the notion "substantially pure" on page 14, lines 18 to 26 of the application as filed.

- Claim 1 as now worded excluded multiple sequences from being present in a given predefined region. The amendment therefore did not violate the requirements of Article 123(3) EPC.

XI. The submissions of respondent I, in as far as they are relevant for the present decision, can be summarised as follows:

*Transfer of the status of opponent 02 from Protogene to Metrigen*

- Neither Protogene nor Metrigen were adversely affected by the opposition division's decision revoking the opposed patent and could therefore not appeal it. The part of the decision which dealt with the issue of transfer of opponent 02's status did not become *res judicata*.
- Protogene filed its opposition in the interest of its core business, i.e. research and development in the field of micro-arrays. By means of the Asset Purchase Agreement of 20 December 2002 all of Protogene's assets belonging to this core business were transferred to Metrigen. Therefore, the status of opponent 02 had to be considered to be transferred to Metrigen in accordance with decision G 4/88.

*Main request and auxiliary requests 1 to 4*

*Feature: "... said surface comprising at least  $10^3$  predefined regions ..."*

*Added matter - Article 123(2) EPC*

- The value of  $10^3$  is nowhere disclosed in the application as filed in connection with the number of predefined regions, nor is there a clear and unambiguous disclosure that the number  $10^3$  described for different monomer sequences is to be equated with the number of predefined regions present on a support.
- The application as filed nowhere disclosed that each predefined region present on the surface of a substrate contains one particular sequence that is not present in any other predefined region.

XII. The submissions of respondent II, in as far as they are relevant for the present decision, can be summarised as follows:

*Main request and auxiliary requests 1 to 4*

*Feature: "... said surface comprising at least  $10^3$  predefined regions ..."*

*Added matter - Article 123(2) EPC*

- The passages at page 28 of the patent application did not support a 1:1 correspondence between the number of sequences and predefined regions. The

application as filed actually explicitly disclosed that the ratio is not exact because more than one sequence might be provided at a region (page 29, lines 1 to 4) and because the sequences are never pure (page 28, line 37 to page 29, line 3). Furthermore, at page 28, lines 19 to 20, the disclosure clearly provided for duplicate synthesis areas.

*Auxiliary request 5*

*Extension of protection - Article 123(3) EPC*

- The wording of claim 1 did not require a 1:1 ratio of sequences vs. predefined regions. It therefore did not establish that there was only one sequence in each predefined region. Thus the claim did not comply with the requirements of Article 123(3) EPC.

XIII. The appellant (proprietor) requested that the decision under appeal be set aside and that:

1) the patent be maintained upon the basis of the main request, or of one of the auxiliary requests 1 to 4 (all submitted with a letter dated 24 April 2009), or upon the basis of auxiliary request 5, submitted at the oral proceedings on 26 June 2009; and

2) questions 1 to 3, submitted at the oral proceedings on 25 June 2009, be submitted to the Enlarged Board of Appeal.

Respondents I and II (opponents 2 and 3) requested that the appeal be dismissed.



XIV. The following documents are mentioned in the present decision:

D75 Declaration of Dr Robert J. Molinari dated  
16 June 2004

M49 Asset Purchase Agreement of 20 December 2002  
between Protogene Laboratories, Inc. and  
Metragen Inc.

M50 Declaration of Dr Thomas Brennan dated  
5 January 2005

M52 Declaration of Nathan Hamilton dated  
7 January 2005

### **Reasons for the Decision**

*Transfer of the status of opponent 02 from Protogene to  
Metragen: Procedural aspects*

1. An issue in the present proceedings is whether the status of opponent was transferred from the original opponent 02 Protogene Laboratories, Inc. ("Protogene") to Metragen, Inc. ("Metragen"). As a matter of principle, the boards of appeal have to examine the question of party status *ex officio* before dealing with the substance of the cases (see decision G 2/04, OJ EPO 2005, 549, point 3.2.5 of the reasons, specifically addressing a procedural situation where there is uncertainty about the validity of a transfer of opponent status). However, the appellant takes the view

that the board is precluded from examining the transfer of opponent status since the transfer was not accepted by the opposition division and neither Protogene nor Metrigen appealed the decision. The core of appellant's argument is that its own appeal does not concern this part of the decision (which was favourable to the appellant) so that the issue of the transfer of opponent status remains finally determined and cannot be decided differently without infringing the principle of prohibition of *reformatio in peius*.

2. According to the established case law of the boards of appeal, the doctrine of *reformatio in peius* does not apply separately to each point or issue decided, or to the reasoning leading to the impugned decision (see T 149/02 of 25 July 2003, point 3.2.1). This case law finds a basis in a passage in decision G 9/92 (OJ EPO 1994, 875, point 11) according to which a non-appealing party as a respondent has the opportunity to make what it considers to be appropriate and necessary submissions in the appeal proceedings to defend **the result** obtained before the first instance [emphasis added by the board]. In decision T 327/92 of 22 April 1997, point 1, the board stated the following:

"In the present case the patent was revoked so there is nothing the Board can refuse the Appellant which the Opposition Division has not already denied it. The doctrine of *reformatio in peius* cannot be extended to apply separately to each point decided by the Opposition Division. Rather the Board of Appeal must examine all material before the Opposition Division [...] as to its relevance to the grounds of invalidity

raised in the opposition, and then decide for itself on the requests made on appeal."

The same view was taken in the decision T 401/95 of 28 January 1999, point 2:

"If an appeal is lodged against an adverse decision of the first instance about the main request, then the whole request is before the Board of Appeal and within its jurisdiction (see decisions T 327/92, point 1 of the reasons, T 583/95, point 2 of the reasons; neither published in OJ EPO). It is the Board's power and duty pursuant to Article 111(1) and 102(3) EPC to decide for itself upon each matter and each issue with regard to the main request and the Board is not bound by any finding of the decision under appeal. Thus, the Board is empowered to reopen and decide upon matters which have been an issue before the Opposition Division [...]."

3. The above principles apply independently of the nature of the issue decided by the opposition division in favour of the appellant, i.e. also where the issue concerns the status of a party or the admissibility of an opposition. On numerous occasions, the boards have held that the admissibility of the opposition is an indispensable procedural requirement for the substantive examination of the opposition submissions at every stage of the proceedings (see also G 3/97, OJ EPO 1999, 245, point 6). Thus even where an opponent is the sole appellant, the admissibility of its opposition has to be ascertained by the board of appeal on its own motion (see e.g. T 289/91, OJ EPO 1994, 649, point 2;

T 960/95 of 31 March 1999, point 2). As illustrated by decision T 28/93 of 7 July 1994, this may have the consequence that a decision which rejected an opposition on substantive grounds is set aside and the opposition rejected as inadmissible.

4. Furthermore, decision T 1178/04 (OJ EPO 2008, 80, point 24) has taken the view that where what is at issue is the admissibility of an opposition or a person's right to be a party, the principle of no *reformatio in peius* is of no application. In that case, the opposition division had considered the transfer of opponent status to be valid, and only the new opponent had appealed the substantive decision. The board considered it to be its duty *ex officio* to examine the validity of the transfer of the opposition and concluded that this duty arises whether or not the issue has been raised by the proprietor and whether or not it has already been the subject of a decision by the opposition division. It also followed that it was irrelevant whether or not the proprietor could have appealed or had in fact appealed (see points 34 to 36 of the decision T 1178/04).
5. The appellant referred to decision T 898/91 of 18 July 1997. In that decision the present board in a different composition was confronted with the situation that the opposition division had rejected one of several oppositions as inadmissible and had revoked the opposed patent on the basis of the other oppositions. Only the patent proprietor appealed. The board came to the conclusion that the opponent whose opposition was held inadmissible should have appealed that part of the decision if it wished to remain party to the appeal

proceedings. In the absence of such an appeal, that part took full legal effect and was not touched by the suspensive effect of the patent proprietor's appeal (see T 898/91, point 1).

6. The board understands the approach adopted in decision T 898/91 as resulting in an exception from the general principles set out above (see points 2 to 4 above). If this approach were to be followed, a distinction with respect to the binding effect of findings of the department of first instance would have to be made between a situation where the admissibility of an opposition was accepted by the opposition division and a situation where it was not accepted: whereas in the first situation the board of appeal is not prevented from reconsidering the issue of admissibility even if the opponent is the sole appellant (see the above-cited decisions T 289/91, T 28/93 and T 960/95), in the second situation it would be prevented from reconsidering the issue unless the opponent concerned has also filed an appeal.
  
7. The board has difficulties in finding a legal justification for such a distinction. Furthermore, the approach adopted in decision T 898/91 leads to the rather unfortunate consequence that one of several opponents whose opposition was rejected as inadmissible but who is fully satisfied with the substantive outcome of the opposition proceedings (e.g. revocation of the patent) would have to file an own appeal merely in order to safeguard its status as a party in appeal proceedings possibly initiated by the proprietor. This would amount to a kind of precautionary appeal which, in the view of the board, is conceptually foreign to

the EPC. In addition, awkward procedural situations might then arise if the proprietor does not file an appeal himself. Dealing with the only appeal of one of several opponents whose opposition was held inadmissible if the proprietor does not appeal against the revocation decision, might amount to a legal conundrum: whereas the patent would have to be regarded as finally revoked, the board would still be concerned with the question whether the appealing party was correctly denied its party status.

8. The board furthermore notes that the procedural situation in the present case which concerns the refusal of a requested transfer of opponent status is not wholly identical to the situation underlying the decision T 898/91 where the relevant issue was the admissibility of one of several oppositions. If in the present case the board considered itself bound by the opposition division's determination of the issue of transfer, it would have to treat the original opponent 02 Protogene as respondent I and would be barred from examining whether Protogene had lost its opponent status due to a transfer. The board would thus be obliged to accept a person as a party to the proceedings which upon examination might reveal itself as not having a proper status.
9. The appellant has also pointed to the provision of Article 106(2) EPC, according to which a decision which does not terminate proceedings as regards one of the parties can only be appealed together with the final decision, unless the decision allows a separate appeal. The argument is made that it would follow from this provision that if proceedings for one of the opponents

are terminated by the department of first instance, an appeal can be taken from that part of the decision, even if the decision did not make termination a separately appealable matter and even if the decision resulted in the revocation of the patent.

The board is unable to see why Article 106(2) EPC should be given such an extensive reading. The provision is concerned with the admissibility of appeals against interlocutory decisions. In the present case the opposition division dealt with all the formal and substantive issues it considered necessary to address in its final reasoned decision. The decision included the issue of transfer of the status of opponent 02 and no separate reasoned decision was taken on this point. Thus there is no need to consider what the procedural consequences would have been if the opposition division, before taking a final decision, had decided on the issue of transfer of opponent status in a separate reasoned interlocutory decision.

10. In view of the reasons set out above, the board comes to the conclusion that, notwithstanding the fact that neither Protogene nor Metrigen appealed the opposition division's decision, it has to examine the question of the transfer of status of opponent 02 *ex officio* before dealing with the substance of the case. The board has noted the appellant's request to refer, in the context of this issue, three questions of law to the Enlarged Board of Appeal (see above, section IX). However, such a referral is considered to be neither necessary nor appropriate for reaching a decision in the present case. The principles developed by the decisions of the Enlarged Board of Appeal (see in particular the cited

passages in G 9/92, G 3/97 and G 2/04) and by the case law of the boards of appeal give a sufficiently clear guidance to the board for determining the issue itself.

*Transfer of the status of opponent 02 from Protogene to Metrigen: Substantive aspects*

11. According to the established case law (see decision G 2/04), an opponent status is not freely transferable. It does however move to the successor in title in case of universal succession such as a takeover or merger of legal persons. Furthermore, it may be transferred or assigned to a third party as part of the opponent's business assets, together with the assets in the interests of which the opposition was filed (see decision G 4/88, OJ EPO 1989, 480). In this context, the term "business" has to be understood in a broad sense as describing an economic activity which is or could be carried on by the opponent and which constitutes a specific part of his business assets (G 4/88, point 5).
  
12. When the original opponent Protogene filed its opposition in October 1999, it was conducting scientific research and development in the field of micro-arrays. The company had been founded in 1996 by Dr Brennan and Dr Molinari. Dr Brennan was its chief scientist until August 2000, a member of the board of directors and its major shareholder. He is the author of declaration M50. Dr Molinari was Protogene's Chief Executive Officer from 1996 to 1999 and vice president from 1999 to April 2000. He was appointed to the board of directors in April 2001 and is the author of declaration D75.



13. During the first few years of its existence, Protogene funded itself by forming R&D partnerships with other companies interested in utilizing or co-developing Protogene's technology. Protogene did not manufacture and sell its own micro-arrays. However its R&D efforts resulted in several granted patents and pending patent applications (see declaration M50, points 4 and 15, and declaration D75, point 4).
  
14. The appellant has argued that at the time when Protogene filed its opposition there was no appropriate economic activity upon which a relevant legal interest could have been based. If, however, such an economic activity existed at all, it could only have been the envisaged chip development collaboration with the corporation Incyte Pharmaceuticals, in the context of which Protogene was encouraged to file the opposition.
  
15. The board does not find these arguments persuasive. Since the subject-matter of the opposed patent concerns high-density arrays of nucleotide or amino acid sequences, the patent fell squarely within Protogene's core activity of scientific research and development in the field of micro-arrays. The opposition was directly connected to this economic activity which, in accordance with the decision G 4/88, qualifies as the "business" in the interest of which the opposition was filed. As the term "business" has to be understood in a broad sense, it also encompasses the economic activities of a biotechnological R&D firm in a development stage. Thus there is no basis for the proposition that Protogene's opposition was not linked

to any business at all or that it was exclusively linked to one specific joint collaboration project.

16. After Protogene had filed its opposition, its business situation worsened. Dr Brennan left the company in late 2000, but he remained a majority shareholder and developed a plan to start a new company that would continue Protogene's work on a smaller scale (see declaration M50, points 5 to 7). Protogene lost money at an increasing rate until the company was running on bridge loans from its investors in early 2001. In April 2001, the board of directors ordered the company to lay off approximately 60% of its employees (see declaration D75, point 6).
  
17. During the summer of 2001, Dr Brennan, on behalf of a newly formed company Creogen, began negotiating with Protogene's board of directors to purchase all of the equipment and technology necessary to enable Creogen to continue Protogene's custom oligonucleotide arrays and array PCR business (see declaration M50, points 7 and 8). In September 2001 the board of directors voted to restructure the company which involved winding down the day to day operations and selling off certain physical assets, in order to make the company a more attractive takeover or merger candidate. On 1 November 2001 an auction took place where most of the equipment was sold to over one hundred different parties (see declaration D75, point 8). However, in accordance with an understanding reached before the auction took place, laboratory equipment necessary for the microassay R&D business was set aside in view of its future sale to Creogen (see declaration D75, point 8, and declaration M50, point 9).

18. The board considers that while the auction led to the transfer of many tangible assets owned by Protogene and generated a considerable amount of money, it did not involve a transfer of business. It is noted in particular that the physical assets were sold to many different persons and that the auction did not concern intangible assets such as Protogene's patent portfolio. Thus none of the buyers at the auction acquired Protogene's micro-array business or a specific part of it.
  
19. Creogen was reincorporated as Metrigen in July 2002 (declaration M50, point 9). On 20 December 2002 an Asset Purchase Agreement (hereafter: "the Agreement") was concluded between Protogene as the seller and Metrigen as the buyer and became effective on 21 December 2002 (see Article II, point 2.1 of the Agreement). In the introductory part of the Agreement it is stated that the seller is engaged in the business of DNA micro-arrays, methods to perform highly parallel experiments on micro-arrays, single nucleotide polymorphism genotyping, and other drug discovery products and services and that the buyer desires to purchase from the seller certain assets of the business.
  
20. According to Article II, point 2.1(a) to (c) of the Agreement, the purchased assets *inter alia* include
  - all tangible personal property listed on a schedule 2.1(a),
  - all intellectual property listed or described on a schedule 2.1(b) together with (i) all of the seller's intellectual property rights associated

therewith, (ii) goodwill associated therewith, (iii) licenses and sublicenses granted and obtained with respect thereto, (iv) rights thereunder, (v) remedies against infringements thereof, and (vi) rights to protection of interests therein under the applicable laws of all jurisdictions,

- all causes of action, lawsuits, judgments, claims and demands of any nature available to or being pursued by the seller with respect to the seller's personal property, seller's intellectual property, or contracts, including the seller's EPO opposition against the Affymetrix patent EP 0 619 321, it being acknowledged that the opposition constitutes an inseparable part of the seller's intellectual property and the assets.

21. Schedule 2.1(a) lists the laboratory equipment which was set aside during the auction in November 2001 and which consisted of the following items:

- five 4'' synthesizers,
- ABM mask aligner,
- Tegal plasma asher/stripper/etcher system and pump w/ fomblin oil,
- Laurell spin coater,
- Universal laser engraver setup for wafer dicing,
- array RT-PCR setup with CCD camera/cycler/chiller,
- 6'' prototype synthesizer and associated electronics,
- Genepix 4000A scanner.

22. Intellectual property rights are defined in Article 1 of the Agreement as including, *inter alia*, all trade

- secrets and other rights in know-how and confidential or proprietary information. Schedule 2.1(b) contains a list of 40 patent applications and patents related to the results of Protogene's research and development.
23. According to Article II, point 2.2, certain assets are excluded from the Agreement, in particular contractual employment arrangements as well as cash, cash equivalents, marketable securities and accounts or notes receivable of the seller.
24. While the Agreement explicitly refers to Protogene's opposition against the European patent in suit as "an inseparable part of the Seller Intellectual Property and the Assets", this as such is not sufficient for a transfer of opponent status since according to the established case law oppositions are not freely transferable (see point 11 above). Rather, in accordance with decision G 4/88, it has to be ascertained whether, by means of the Agreement, those business assets of Protogene in the interests of which the opposition was filed were transferred to Metrigen.
25. The appellant takes the view that, at the time of the conclusion of the Agreement, Protogene had no business activities any more. All the business terminated in autumn 2001 so that by the end of 2002 Protogene had neither customers nor employees. The appellant in particular relies on the declaration D75, point 7, which reads as follows:

"Protogene had ceased on-going commercial efforts and was no longer selling product, remaining management attention being completely focused from

then on at providing liquidity to investors by selling business assets as part of the shut down."

26. With respect to Protogene's patent portfolio, the appellant argues that the holding of intellectual property rights should not be equated with a business as an economic activity since patents are only negative rights and do not give a positive right to use the claimed invention. Furthermore, since all the employees had already left the firm, trade secrets which have to be regarded as a key component of any business and as being of significant importance for R&D businesses could not be transferred any more.
27. The board does not agree with this line of argument. Even a firm which has closed its day-to-day operations and is going to be dissolved in view of financial difficulties has a business as long as there are business assets which allow the carrying out of a business activity connected with them. While in such circumstances one may possibly speak of a business "in a frozen state" or a "residual" business, there is nevertheless still a business (see decision G 4/88, point 5: "an economic activity which is or **could** be carried on" [emphasis added by the board]).
28. In the present case, when the Agreement was concluded, Protogene still owned valuable tangible and intangible property relating to its business as defined in the introductory part of the Agreement. Furthermore, the plan of the company's majority shareholder Dr Brennan was to continue Protogene's work on a smaller scale within a new company (see point 16 above and declaration M52, points 3 to 5). In accordance with

- this plan, certain laboratory equipment was set aside in the auction of November 2001 with the purpose of being later transferred to the new company (see point 17 above). Therefore the board concludes that Protogene still had a business that could be transferred when the Agreement was concluded.
29. The next issue to be decided is whether the opposition division was correct in holding that the Agreement had the effect of only transferring certain items of property and did not result in the transfer of Protogene's business or a specific part of it.
30. The board accepts that according to the case law of the boards of appeal there may well be situations in which a transfer of industrial property rights is not sufficient for accepting the claimed transfer of opponent status, in particular where the relevant business activity is continued by a person different from the assignee of the industrial property rights (see T 659/92, OJ EPO 1995, 519, point 3.2). On the other hand, the mere fact that certain assets are explicitly excluded in an assignment contract is as such not sufficient for concluding that the contract did not result in the transfer of a business or a specific part of it (see T 799/97 of 4 July 2001, point 2.4).
31. In the present case, the board is convinced that, following the plan conceived by Protogene's majority shareholder and former chief scientist Dr Brennan, the Agreement was executed for the purpose of transferring to Metrigen all the business assets considered to be relevant for continuing Protogene's core business,

i.e. research and development in the field of micro-arrays. It is noted in particular that the Agreement related to the selling company's patent portfolio and to essential laboratory equipment. This view finds further confirmation by the declaration M52 given by Metragen's president and chief executive officer.

32. It is true that, as correctly stated by the opposition division and the appellant, the Agreement did not encompass all of Protogene's assets without exception. However, these exceptions concern assets which, as persuasively explained by respondent I, were of no importance for continuing the micro-array business. For example, it is perfectly understandable that Metragen did not see any need to acquire Protogene's remaining trademarks which could be regarded as valueless since no commercial sales had been generated or even as having negative connotations in the marketplace in view of Protogene's lack of success (see declaration M50, point 15.b). The appellant was unable to point to any asset remaining with Protogene which could be reasonably considered as relevant, let alone as essential, for continuing the micro-array business.
33. When taking into account the intentions of Protogene's majority shareholder and of Metragen's chief executive officer (see declaration M50, points 6 to 15, and declaration M52, points 3 to 5), the provisions of the Agreement and Protogene's economic situation in December 2002, there is nothing to suggest that Protogene intended to retain and revitalize its micro-array business or any part of it after the conclusion of the Agreement. What remained of Protogene afterwards was an empty shell.



34. The board therefore comes to the conclusion that the business assets in the interest of which the original opponent 02 Protogene filed its opposition were validly transferred to Metrigen. This has the consequence that, following Metrigen's corresponding request and its submission of appropriate evidence in the course of the proceedings before the opposition division, the opponent status has validly been transferred from Protogene to Metrigen. Thus Metrigen is the correct respondent I in the present appeal proceedings.

*Main request*

*Feature: "... said surface comprising at least  $10^3$  predefined regions ..."*

*Added matter - Article 123(2) EPC*

35. The contentious amendment "said surface comprising at least  $10^3$  predefined regions" in claim 1 relates to two features, i.e. firstly, to a surface comprising  $10^3$  predefined regions and secondly, to a surface comprising more than  $10^3$  predefined regions. Both aspects of the amendment have to comply with the requirements of Article 123(2) EPC in order to be allowable.

36. In accordance with the case law of the boards of appeal, the relevant question to be answered in assessing whether an amendment adds subject-matter extending beyond the content of the application as filed is whether the amendments were directly and unambiguously derivable from the application as filed (see Case Law

- of the Boards of Appeal of the European Patent Office, 5th Edition, III.A.2.1, page 259).
37. The appellant accepted that the wording of claim 25 as originally filed, which is for a substrate for screening for biological activity, said substrate comprising **10<sup>3</sup> or more different ligands** on a surface thereof in predefined regions, does not provide a direct support for the feature recited in claim 1 relating to a surface comprising **10<sup>3</sup> predefined regions**. The appellant has however argued that the application as originally filed provided support for a situation where the 10<sup>3</sup> different ligands could directly be equated with 10<sup>3</sup> predefined regions. It therefore needs to be established whether or not the amendment of the feature "a surface of a substrate comprising **10<sup>3</sup> ligands**" to "a surface of a substrate comprising **10<sup>3</sup> predefined regions**" can directly and unambiguously be derived from the application as originally filed.
38. The passage in the patent application as filed corresponding to claim 25 as filed and on which the appellant bases its argument is on page 28, line 28 to line 33, reading: "*In some embodiments a single substrate supports more than about 10 different monomer sequences ..., although in some embodiments more than about 10<sup>3</sup> ... or 10<sup>8</sup> **different sequences** are provided on **a substrate***" (emphasis added by the board). On the same page, in line 33 to 36 the application then states that: "*Of course within a region of the substrate in which a monomer sequence is synthesised, it is preferred that the monomer sequence be substantially pure*". The meaning of "substantially pure" is defined on page 14 (lines 18 to 21) of the application as filed:

"A polymer is considered "substantially pure" within a predefined region of a substrate when it exhibits characteristics that distinguish it from other predefined regions". In a following passage on page 29, in lines 4 to 8, the application discloses that "[a]ccording to some embodiments, several sequences are intentionally provided within a single region ...".

39. From the above referred to passages the board can agree that the application as originally filed discloses a substrate with a surface comprising  $10^3$  different monomer sequences which are substantially pure.
  
40. However, on page 14 (lines 9 to 16) of the application as originally filed a "predefined region" is defined as "a localized area on a surface which is, was, or is intended to be activated for formation of a polymer. The predefined region may have any convenient shape, ..." [emphasis added by the board]. This definition of the term "predefined region" is intentionally independent from the monomer sequences or ligands actually present on the surface. In particular, a predefined region can merely be intended to be activated, but not necessarily yet have been activated. Accordingly, the very definition of the notion "predefined region" in the application as originally filed prevents a clear and unambiguous direct 1:1 correlation of the amount of different monomer sequences or ligands on the surface of a substrate vs. the amount of predefined regions in the same substrate.
  
41. In view of the above considerations, the board is unable to clearly and unambiguously infer from the application as originally filed a substrate with a

surface comprising  $10^3$  predefined regions. Accordingly, claim 1 of the main request fails to comply with the requirements of Article 123(2) EPC.

*Auxiliary requests 1 to 4*

*Feature: "... said surface comprising at least  $10^3$  predefined regions..."*

*Added matter - Article 123(2) EPC*

42. The feature "said surface comprising at least  $10^3$  predefined regions" is also, in an identical context, part of the wording of claim 1 of auxiliary requests 1 to 4. As a consequence of the decision of the board on claim 1 of the main request, these claims *mutatis mutandis* fail to comply with the requirements of Article 123(2) EPC.

*Auxiliary request 5*

*Extension of protection - Article 123(3) EPC*

43. As compared to the wording of claim 1 of the patent as granted and of the previous requests, claim 1 of auxiliary request 5 defines the surface of the substrate not as "comprising at least  $10^3$  predefined regions" but as "having at least  $10^3$  different nucleotide or amino acid sequences thereon within predefined regions" thereby replacing the feature that gave rise to the decision of the board that the subject-matter of claim 1 of the main and auxiliary requests 1 to 4 failed to comply with the requirements of Article 123(2) EPC. In view of the following, it is

not necessary for the board to decide whether or not this new feature contained in claim 1 of auxiliary request 5 complies with the requirements of Article 123(2) EPC.

44. As compared to claim 1 of the patent as granted, claim 1 of auxiliary request 5 now relates to a method of investigating by receptor/ligand binding a polynucleotide or amino acid sequence by the use of a substrate with a surface, said surface having at least  $10^3$  different nucleotide or amino acid sequences thereon within predefined regions, **whereby these predefined regions are distinguishable by their biological activity resulting from uniformity of sequence measured by binding with a selected ligand or receptor** (see section IX, above).
45. This inserted definition of the predefined regions does not exclude the use of substrates with surfaces which contain less than  $10^3$  predefined regions which is illustrated by way of the example that when 1000 different sequences are contained in 500 predefined regions, e.g. two sequences contained in each predefined region, then these 500 predefined regions are still "distinguishable by their biological activity when measured by binding with a selected ligand or receptor". The fact that the biological activity of the predefined regions is defined in the claim to be "resulting from the uniformity of sequence" may be relevant for the selection of the appropriate biological activity to be measured, but is, however, not limiting in respect of the number of the different sequences present in a particular predefined region.

46. The above finding also finds support in the passages to which the appellant has referred to in support of the amendment and the view that claim 1 excludes the presence of multiple sequences in one predefined region, namely on page 28, lines 33 to 36, of the application as originally filed referring to the preferred embodiment of synthesising "substantially pure" sequences within a region of the substrate and to the definition of the notion "substantially pure" on page 14, lines 18 to 26: *"A polymer is considered "substantially pure" within a predefined region of a substrate when it exhibits characteristics that distinguish it from other predefined regions. Typically, purity will be measured in terms of biological activity or function as a result of uniform sequence. Such characteristics will typically be measured by way of binding with a selected ligand or receptor."*
47. Article 123(3) EPC provides that a European patent may not be amended in such a way as to extend the protection it confers. The surface of the substrate to which claim 1 as granted referred to was defined to comprise at least  $10^3$  predefined regions. In the above passages it was established that the definition of the predefined regions as now contained in the wording of claim 1 of auxiliary request 5 does not exclude a substrate having a surface comprising less than  $10^3$  predefined regions. Accordingly, the amendment does not comply with the requirements of Article 123(3) EPC.

**Order**

**For these reasons it is decided that:**

The appeal is dismissed.

The Registrar

The Chair

P. Cremona

U. Kinkeldey