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**Datasheet for the decision  
of 2 July 2015**

**Case Number:** T 2473/10 - 3.4.02

**Application Number:** 97945249.7

**Publication Number:** 0944820

**IPC:** G01N21/00, G01N33/53,  
G01N33/533, G01N33/543,  
C12M1/00, C12Q1/00

**Language of the proceedings:** EN

**Title of invention:**

MULTI-ARRAY, MULTI-SPECIFIC ELECTROCHEMILUMINESCENT TESTING

**Applicant:**

Meso Scale Technologies, LLC.

**Headword:**

**Relevant legal provisions:**

RPBA Art. 12(4)  
EPC 1973 Art. 113(2)

**Keyword:**

Late-filed request - admitted (no)  
Basis of decision - text submitted or agreed by applicant (no)

**Decisions cited:**

T 1007/05

**Catchword:**



**Beschwerdekammern**  
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Case Number: T 2473/10 - 3.4.02

**D E C I S I O N**  
**of Technical Board of Appeal 3.4.02**  
**of 2 July 2015**

**Appellant:** Meso Scale Technologies, LLC.  
(Applicant) 16020 Industrial Drive  
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**Representative:** Duckett, Anthony Joseph  
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**Decision under appeal:** **Decision of the Examining Division of the  
European Patent Office posted on 22 October 2010  
refusing European patent application No.  
97945249.7 pursuant to Article 97(2) EPC.**

**Composition of the Board:**

**Chairwoman** T. Karamanli  
**Members:** H. von Gronau  
F. Maaswinkel

## Summary of Facts and Submissions

I. The appeal of the applicant is directed against the decision to refuse European patent application No. 97 945 249.7.

II. The following documents cited during the proceedings before the examining division are relevant for the present decision:

D3: US 5 098 771 and

D6: JOURNAL OF IMMUNOLOGICAL METHODS, vol. 195, no. 1, 9th September 1996, pages 15-25, ISSN 0022-1759; GEHRING A G et al: "Enzyme-linked immunomagnetic electrochemical detection of Salmonella typhimurium".

III. The course of the first-instance proceedings may be summarised as follows:

On entry into the regional phase before the EPO the applicant filed amended claims, and in a first communication the examining division raised several objections against these claims.

After having filed further amended claims the applicant received a second communication from the examining division dated 1 August 2007. In point 1, second paragraph, of this communication, the examining division raised the objection that the feature of exposed conductive particles at the surface of the composite being substantially free of matrix without the feature of the particles being carbon fibrils was considered to extend beyond the content of the original disclosure, contrary to Article 123(2) EPC. In a reply to this communication, the applicant filed a set of amended

claims, replacing the previous set of claims on file, and confirmed its request for oral proceedings.

In its communication annexed to the summons to oral proceedings of 5 July 2010, the examining division raised an objection of lack of inventive step in respect of the subject-matter of claim 1 based on documents D6 and D3 (cf. point 1.3 of that communication) and suggested inter alia combining claims 1 and 4 of the request then on file. In the set of amended claims filed with a letter dated 27 August 2010 and replacing the previous set of claims on file, the applicant did not follow this suggestion and instead combined the features of claim 1 with the features of claim 4 of the previous request, omitting the feature of said conductive particles being carbon fibrils. The applicant did not file an auxiliary request. According to a communication dated 20 September 2010 summarising a telephone conversation on 15 September 2010, the primary examiner told the applicant that claims 1 and 17 filed with letter dated 27 August 2010 were considered to infringe the requirements of Article 123(2) EPC because the omission of the feature that the conductive particles at the surface of the composite were carbon fibrils constituted an intermediate generalisation for which there was no basis in the original disclosure. The examiner also informed the applicant that the subject-matter of claim 1 was still regarded as obvious in the light of documents D6 and D3.

In its response of 23 September 2010 to this telephone conversation, the applicant requested only that the oral proceedings be cancelled and that examination be continued in writing.

Oral proceedings were held on 28 September 2010 in the absence of the applicant. At the end of the oral proceedings the chairman announced the decision that the application was refused.

- IV. In its decision, the examining division refused the application in particular on the ground that claims 1, 9 and 17 of the sole request then on file infringed Article 123(2) EPC because the omission of the feature "*said conductive particles being carbon fibrils*" constituted an intermediate generalisation for which there was no basis in the application as filed. In addition the examining division found that the subject-matter of claim 1 without the above feature lacked an inventive step in view of documents D6 and D3.
- V. With the statement setting out the grounds of appeal the applicant (appellant) filed an amended set of claims of a sole request and argued that these claims overcame the examining division's objections under Articles 123(2) and 56 EPC.
- VI. With the summons to oral proceedings dated 18 February 2015 the board issued a communication under Article 15(1) RPBA giving its preliminary opinion. The board informed the appellant that at the oral proceedings, exercising its discretion under Article 12(4) RPBA, it would first have to decide whether the sole request filed with the statement of grounds of appeal would be admitted into the appeal proceedings. It noted that independent claim 1 no longer contained the feature that the electrodes comprised exposed conductive particles at the surface of the composite, the conductive particles being free of matrix, which had been objected to by the examining division under Article 123(2) EPC. Instead, claim 1 comprised for the first

time the features "*said binding reagents are immobilized by non-specific adsorption directly to the electrode surface or by covalent attachment to chemical functional groups on the surface of the electrode*". The board took the view that the subject-matter of independent claim 1 was therefore limited in another direction and that, in addition, it appeared that the fresh features were not in the claims filed on entry into the regional phase and had therefore probably not even been searched. Admitting these claims into the appeal proceedings would therefore result either in the remittal of the case to the department of first instance for further prosecution or in the assessment of newly submitted facts for the first time by the board. Neither of these options appeared to be appropriate and acceptable, because they appeared to be contrary to the nature of the appeal proceedings and the criterion of procedural economy. The board noted that the appellant had not provided any reasons why the request had only been filed with the statement of grounds of appeal and not earlier in the first-instance proceedings.

VII. In a reply dated 2 June 2015 the appellant gave reasons why, in its view, the subject-matter of all claims of the present request had been searched and why the present request should be admitted into the appeal proceedings. This letter contained the following requests:

"1.1 The Appellant maintains its previous request that the Board of Appeal sets aside the decision of the Examining Division dated 22 October 2010 refusing European patent application no. 97945249.7.

1.2 In view of the comments of the Board in the preliminary opinion, the Appellant requests that the application be remitted back to the Examining Division

for further consideration or else allowed on the basis of the amended set of claims (Claims 1-26) enclosed with the Grounds of Appeal."

VIII. With a letter dated 1 July 2015, the appellant informed the board only that it would not be attending the oral proceedings.

IX. Oral proceedings were held on 2 July 2015, in the absence of the duly summoned appellant. At the end of the oral proceedings the chairwoman announced the board's decision.

X. Independent claim 1 of the request as filed with the grounds of appeal reads as follows:

"1. A disposable multiwell plate for use in an electrochemiluminescence binding assay, said plate comprising:

(i) one or more electrodes comprising binding reagents immobilized thereon, said binding reagents forming a binding domain; and

(ii) a mask comprising an array of holes, wherein said mask is sealed against said one or more electrodes so as to form said plate, wherein the holes in the mask define wells having walls defined by the mask and bottom comprising one or more of said electrodes; characterised in that:

(iii) said one or more electrodes comprise said binding reagents immobilized on a composite, said composite comprising a plurality of conductive particles dispersed within a matrix; and

(iv) said binding reagents are immobilized by non-specific adsorption directly to the electrode surface or by covalent attachment to chemical functional groups on the surface of the electrode."



## **Reasons for the Decision**

1. The appeal is admissible.
2. The duly summoned appellant did not attend the oral proceedings. However, under Rule 71(2) EPC 1973, the proceedings continued without the appellant. In accordance with Article 15(3) of the Rules of Procedure of the Boards of Appeal (RPBA, OJ EPO 2007, 536) the board relied for its decision only on the appellant's written submissions. The board was in a position to decide at the conclusion of the oral proceedings, since the case was ready for decision (Article 15(5) and (6) RPBA), and the voluntary absence of the appellant was not a reason for delaying a decision (Article 15(3) RPBA).
3. Admission of the request filed with the statement of grounds of appeal (Article 12(4) RPBA)
  - 3.1 According to Article 12(4) RPBA, everything presented by the parties under Article 12(1) RPBA has to be taken into account by the board if and to the extent it relates to the case under appeal and meets the requirements in Article 12(2) RPBA. However, Article 12(4) RPBA also empowers the boards of appeal to hold inadmissible facts, evidence or requests which could have been presented or were not admitted in the first-instance proceedings. Thus the boards of appeal, as a review body, retain discretion not to admit sets of claims of requests which had not been submitted during the first-instance proceedings (see Case Law of the Boards of Appeal of the EPO, 7th edition 2013, IV.E. 4.3.3 b)). The board is aware that amended claims of requests filed together with the statement of grounds of

appeal have in many cases been admitted into appeal proceedings if they constituted a legitimate reaction to the reasoning underlying the appealed decision. Indeed, such amended claims filed with the statement of grounds of appeal may achieve the goal of "a more defined and controlled initial phase of proceedings" (see decision T 1007/05), in particular if they serve to avoid later amendments. But this does not mean that the board is obliged to admit such requests solely because they were filed with the statement of grounds of appeal.

- 3.2 In its reply dated 2 June 2015 (see point VII above), the appellant maintained that the request filed with the grounds of appeal was admissible under Article 12(4) RPBA. In support of this view, it argued that: (i) the amendments filed had been a legitimate reaction to the reasons given in the examining division's decision; (ii) the amendments had not directed the claims in an entirely new direction in comparison to those on which the examining division's decision was based, but merely made clear the nature of the immobilisation of the binding reagents on the composite electrode surface; (iii) the proposed amendments clearly and unambiguously had addressed the added subject-matter and inventive step objections which ultimately had given rise to the refusal and were thus prima facie allowable; and (iv) since the present appeal proceedings were ex parte proceedings, no other party to the proceedings had been inconvenienced or taken by surprise by the amendments.

The appellant stated further that the examining division's decision had been based on an incorrect construction of the claims, as well as the content of the disclosure of document D6. D6 had first been cited in the summons to oral proceedings in first-instance proceedings with regard to inventive step. The claims

had consequently been amended to refer to the feature that "said one or more electrodes comprise exposed conductive particles at the surface of said composite, said exposed conductive particles being substantially free of matrix". Nevertheless, in the subsequent telephone conversation of 15 September 2010 with the primary examiner it had been indicated that the combination of documents D6 and D3 was still considered prejudicial to inventive step.

The appellant disagreed in particular with the examiner considering that the combination of documents D6 and D3 would still lead the skilled person to use a composite electrode comprising exposed conductive particles at the surface, with reference being made to the magnetic bead of Figure 2 of D6, which had been alleged to correspond to a conductive particle in contact with the electrode surface. Neither in the minutes of the telephone consultation nor in the subsequent decision refusing the application, was the objection fully substantiated. The examiner had not explained how substituting the carbon composite of D3 for the graphite ink in D6 would necessarily give rise to a multiwell plate falling within the scope of the amended claims.

- 3.3 However, the appellant did not explain why the present request could not already have been filed after the telephone conversation on 15 September 2010, during which the examiner explained the objections, at least as an auxiliary request. From the appellant's explanations the board cannot see how, if at all, the reasoning of the decision differed from the minutes of the telephone conversation and the previous communications such that the motivation for filing amended claims arose only from the reasoning of the refusal decision.

3.4 The board has therefore to establish whether it was a legitimate response to the decision under appeal to file the amended claims according to the present request. In other words, it has to establish what in the contested decision could reasonably be construed as justification for filing the present request only with the statement of grounds of appeal and not already in the first-instance proceedings.

Taking into account the course of the proceedings before the examining division (see point III above) and the reasons of the appealed decision (see point IV above), the board cannot see any justification why the appellant could not already have presented the request in the first-instance proceedings. The examining division did not provide another line of reasoning in its decision that could not already be derived from the preceding communications and the telephone conversation.

Furthermore, the appellant could not be surprised that the examiner in the telephone conversation considered the claims not to be allowable since, in particular, the objection under Article 123(2) EPC regarding the omission of the feature of said conductive particles being carbon fibrils in claims 1 and 17 had been raised before. The board, taking into account the circumstances of the case, therefore comes to the conclusion that the appellant could have been expected to file the present request during the first-instance proceedings. It therefore has the discretion not to admit the request filed with the grounds of appeal in accordance with Article 12(4) RPBA.

3.5 In exercising this discretion, the board has considered the following aspects, also taking into account the criteria that have been developed by the boards of appeal for requests not submitted in examination

proceedings (cf. Case Law of the Boards of Appeal, 7th edition 2013, IV.E.4.3.3 b)).

- 3.5.1 In the present case, the appellant had been given several opportunities to file amended claims in the first-instance proceedings (see point III above). It was only with the statement of grounds of appeal that the appellant filed an amended set of claims of a sole request which no longer contained the feature which had been objected to by the examining division under Article 123(2) EPC (see also points III and IV above).
- 3.5.2 The present independent claim 1 comprises for the first time the feature that *"said binding reagents are immobilized by non-specific adsorption directly to the electrode surface or by covalent attachment to chemical functional groups on the surface of the electrode"*, replacing the feature that the electrodes comprise exposed conductive particles at the surface of the composite, the conductive particles being free of matrix, in independent claim 1 of the sole request subject to the contested decision. These features define different aspects. The replaced feature defines the structure of the matrix itself, whereas the newly introduced feature defines how the binding reagents are immobilised. Thus the board does not accept the appellant's argument that the amended features merely clarify the nature of the immobilisation of the binding reagents on the composite electrode surface. The subject-matter of independent claim 1 of the present request is therefore limited in another direction than the subject-matter of independent claim 1 of the request underlying the appealed decision. Hence, the subject-matter of claim 1 filed with the grounds of appeal was previously not considered by the examining division in its decision.

3.5.3 The filing of claim 1 of the present request was not a direct consequence of the reasoning of the contested decision. Quite the contrary, the appellant could not have been expected to select this particular claimed combination of features.

3.5.4 The board has also serious doubts that the subject-matter of present claim 1 was searched in the regional or international phase, for the following reasons:

The combination of the features of claim 1 as filed with the grounds of appeal was not part of the claims filed on entry into the regional phase before the EPO. The appellant in its letter dated 2 June 2015 referred to claims 1 and 41 of those claims (i.e. the set of claims filed on 16 April 1999). Claim 41 reads: "*A multi-well plate for conducting ECL binding assays comprising a conductive composite electrode, said composite electrode comprising conductive particles dispersed in a matrix, and further comprising a mask with holes supported on said electrode, said holes acting to form segregated wells having a well bottom defined by the composite electrode and well walls defined by the mask*", and claim 1 defines: "*An electrode for an electrochemiluminescence binding assay comprising binding reagents immobilized on a composite, said composite comprising a plurality of conductive particles dispersed within a matrix, said binding reagents forming a binding domain*". Neither of these claims specify how binding reagents are immobilised on the surface of the electrode. In addition, both claims are independent claims and do not suggest combining their features. The other claims likewise do not define the combination of features of present claim 1.

3.5.5 It is also not apparent to the board where in the 236 pages of the original international application the subject-matter of present claim 1, i.e. the combination of the claimed features, is disclosed.

Under point 3.2 of the grounds of appeal the appellant indicated page 114, lines 25-28 in combination with lines 10-11, as a basis in the application as filed for the feature that "said binding reagents are immobilized by non-specific adsorption directly to the electrode surface or by covalent attachment to chemical functional groups on the surface of the electrode".

In its letter dated 2 June 2015, the appellant also referred to section 5.15 of the original specification as a basis for the amended independent claim 1.

Lines 10-11 of page 114 of the original international application as published read: "*The electrode may comprise a composite of different materials*", and lines 25-28 of the same page read: "*Binding reagents may be immobilized by non-specific adsorption directly to the electrode surface or by covalent attachment to a chemical functional groups on the surface of the electrode*".

These text passages do not disclose that the composite comprises a plurality of conductive particles dispersed within a matrix and a disposable multiwell plate.

A disposable multiwell plate for use in ECL essays is only disclosed on page 131, lines 7-20, i.e. two sections later: "*The invention includes a disposable multiwell plate for use in ECL assays (hereon referred to as an "ECL Plate"). In one embodiment, an ECL Plate is manufactured by shaping (e.g., pressing, molding, or forming) a conductive composite into the form of a*

*multiwell microtiter plate. In another embodiment, a mask is formed that comprises an array of holes through a sheet of a material. Such a mask is then sealed against an electrode (the electrode is preferably a conducting composite or a fibril mat; the preparation of fibril mats is described in detail in Section 5.7, Section 5.18 and the references therein). The holes through the mask will then define wells with walls comprising the mask and bottom comprising the electrode". A composite comprising just a plurality of conductive particles dispersed within a matrix is not apparent in this relationship.*

Therefore, the board cannot immediately recognise from the indications of the appellant where in the 236 pages of the original application documents the subject-matter of present claim 1 is disclosed.

- 3.5.6 By presenting its sole and amended request only in appeal proceedings the appellant made it impossible for the board to review the contested decision. Admitting these claims as filed with the grounds of appeal into the appeal proceedings would therefore result either in the remittal of the case to the department of first instance for further prosecution or in the assessment of newly submitted facts for the first time by the board. Neither of these options appear to be appropriate and acceptable under the above-noted circumstances.
4. For the above reasons, the board, exercising its discretion under Article 12(4) RPBA, did not admit the sole request filed with the statement of grounds of appeal into the appeal proceedings.
5. Consequently, there are no appellant's requests in the appeal proceedings. Thus there is no version approved by



the appellant in the sense of Article 113(2) EPC 1973 on which a patent could be granted. The appeal is therefore to be dismissed.

## Order

### For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairwoman:



M. Kiehl

T. Karamanli

Decision electronically authenticated