DECISION of 30 September 2003

Case Number: T 0704/02 - 3.3.5
Application Number: 99203886.9
Publication Number: 1002572
IPC: B01J 19/00
Language of the proceedings: EN

Title of invention:
The combinatorial synthesis of novel materials

Applicant:
THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, et al

Opponent:

Headword:
Combinatorial synthesis/UNIVERSITY OF CALIFORNIA

Relevant legal provisions:
EPC Art. 76(1), 83, 84, 111(1)

Keyword:
"Amended claims - clarity (yes)"
"Sufficiency of disclosure (yes)"
"No extension beyond parent application - remitted for further prosecution"

Decisions cited:

Catchword:

Case Number: T 0704/02 - 3.3.5

DECISION
of the Technical Board of Appeal 3.3.5
of 30 September 2003

Appellant: THE REGENTS OF THE UNIVERSITY OF CALIFORNIA
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Decision under appeal: Decision of the Examining Division of the European Patent Office posted 19 February 2002 refusing European application No. 99203886.9 pursuant to Article 97(1) EPC.

Composition of the Board:
Chairman: R. K. Spangenberg
Members: G. J. Wassenaar
          M. B. Günzel
Summary of Facts and Submissions

I. European patent application No. 99 203 886.9, refused by a decision of the Examining Division, was a divisional application of earlier application 95 937 472.9/0 789 671, based on the International Application No. PCT/US95/13278, published under No. WO 96/11878. The decision was taken on the basis of the set of claims 1 to 30, filed with the letter dated 15 June 2001. Claims 1 and 2 thereof read as follows:

Claim 1:

"A process for the identification of materials having useful properties comprising
a) forming an array of more than 10 different materials on a substrate in regions, the materials being
   i) inorganic materials formed by delivering the inorganic materials in a liquid phase, and varying the composition, stoichiometry or amount of the delivered components between regions,
   ii) organometallic materials, or
   iii) non biological organic polymers and
b) screening the materials of the array for useful properties,
wherein the regions are of size less than 5 cm$^2$ and density greater than 0.1 regions/cm$^2$."

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Claim 2:

"A process according to claim 1 in which the array is screened for an electrical, thermal, mechanical, morphological, optical, magnetic and/or chemical property."

II. The Examining Division held that the subject-matter of claims 1 and 2 extended beyond the content of the earlier application as filed (Article 76(1) EPC), that claim 1 lacked clarity within the meaning of Article 84 EPC and that the invention according to claims 1 and 2 was not disclosed in a manner sufficiently clear and complete to be carried out by a person skilled in the art. With respect to the unallowable extension they argued that the parent application only disclosed a very limited process for forming arrays of interaction materials on a substrate by delivering components of each individual material to specific regions where they were reacted. With respect to the objections under Articles 83 and 84 EPC they essentially argued that a process relating to the identification of materials having useful properties had no particular meaning where the only instruction given to the skilled person was to look for useful properties and that it was impossible to identify products whose properties had not been defined. With respect to claim 2 it was remarked that the vague indications of the properties to be screened were not regarded as a clear instruction.

III. The appellant lodged an appeal against this decision. With the statement of grounds of appeal the appellant filed a set of amended claims 1 to 26 as a main request.
Claim 1 thereof, the only independent claim, read as follows:

"A process for the identification of materials comprising

i. forming an array of more than 10 different materials on a substrate in regions, the materials being inorganic materials, organometallic materials or non-biological organic polymers the array being formed by
   a. delivering two or more components of the materials to the regions of the substrate,
   b. varying the composition and/or stoichiometry of the delivered components between the regions and
   c. simultaneously reacting the components to form more than ten different materials at the predefined regions, whereby the array of non-biological organic polymers is formed without stepwise coupling by a method further comprising adding an initiator to the regions, polymerising the components in the regions on the substrate and allowing the polymerising reaction to proceed to form the non-biological polymers, and

ii. screening the materials of the array for a property selected from an electrical, thermal, mechanical morphological, optical, magnetic and a chemical property."

The appellant argued that although the invention in the parent application was primarily described with respect to the preparation of inorganic materials it was clearly indicated that the same method could be readily
applied in the preparation of other materials and that the concept of materials delivered to the substrate was no longer within the claims. The properties which were looked for were now clearly defined.

IV. The appellant requested that the application be granted with the claims of the main request or, alternatively, that the application be returned to the examining division for further examination on the basis that the reasons for the decision to refuse have been overcome by virtue of the amendments to the claims incorporated in the main request.

Reasons for the Decision

1. Allowability of the amendments under Article 76(1) EPC.

The process steps of claim 1 are based on the original parent application.

With respect to the requirement of forming an array of more than 10 different materials in regions on a substrate, see page 6, lines 6 to 8 and page 20, lines 30 to 31. The latter sentence makes it abundantly clear, that the feature "more than 10" was not intended to be limited to inorganic materials.

With respect to features i.a and i.b, see page 4, line 12 to page 5, line 5.

With respect to feature i.c, see page 14, lines 14 to 16 and page 50, lines 6 to 12.
With respect to feature ii, see page 4, lines 22 to 27. Amended claim 1, therefore, fulfils the requirements of Article 76(1) EPC.

2. Clarity within the meaning of Article 84 EPC.

The process steps of claim 1 are clear and supported by the description. The fact that claim 1 covers almost any technically relevant property does not mean that the properties are not clearly defined. It belongs to the nature of the invention that the process is applicable to the screening of materials for any measurable property of the kinds indicated in claim 1, a skilled person might be interested in, whereby the skilled person is free to choose any such property.

3. Disclosure of the invention within the meaning of Article 83 EPC.

The Board can accept the appellant's submission that the term "screening" clearly and unambiguously refers to the determination of the presence or absence of a predetermined measurable property of the kinds indicated. Once the components to be delivered and the property to be screened having been chosen, the description, comprising examples concerning the screening of the claimed properties, give sufficient guidance how to perform the claimed process steps. The Examining Division has not argued that there are materials and technical properties within the realm of present claim 1 which are not accessible for a skilled person. Also the Board does not see any unsurmountable problems in this respect. The Board, therefore, holds
that the present application also fulfils the requirements of Article 83 EPC.

4. Novelty and inventive step of the subject-matter of present claim 1 have not been discussed by the Examining Division. The Board deems it appropriate to have these issues investigated by the first instance in order to know whether there are any objections at all in this respect and, if any, what the nature of these objections is. Thus the Board exercises its power under Article 111(1) EPC to remit the case to the first instance for further prosecution.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the first instance for further prosecution.

The Registrar: The Chairman:

U. Bultmann R. Spangenberg