Case Number: T 1132/10 - 3.3.05
Application Number: 95937472.9
Publication Number: 789671
IPC: C01G 51/04, B01J 19/00, C01G 51/00

Language of the proceedings: EN

Title of invention:
The combinatorial synthesis of novel materials

Patent Proprietor:
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Opponents:
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HENKEL KGaA
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H.T.E AG (The High Throughput Experimentation Company)
BASF SE

Headword:
Combinatorial/REGENTS-SYMYX

Relevant legal provisions:
EPC Art. 54(1)(2)
RPBA Art. 12(4)

Keyword:
"Novelty (main request): no"
"Admissibility (first to thirteenth auxiliary request): no - auxiliary requests could have been filed earlier"

Decisions cited:
T 0144/09, R 0011/11

Catchword: -
Case Number: T 1132/10 - 3.3.05

DECISION
of the Technical Board of Appeal 3.3.05
of 23 April 2013

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Decision under appeal:
Decision of the Opposition Division of the European Patent Office posted 17 March 2010 revoking European patent No. 789671 pursuant to Article 101(3)(b) EPC.

Composition of the Board:
Chairman: G. Raths
Members: J.-M. Schwaller, C. Vallet
Summary of Facts and Submissions

I. The present appeal lies from the decision dated 17 March 2010 in which the opposition division revoked European patent No. 0 789 671. The decision concerned the patent as granted (main request) and various amended versions submitted with the proprietor's letter dated 25 June 2008 (auxiliary requests 1 to 9).

II. Claim 1 as granted reads as follows:

"1. A process for the production of an array of materials from at least two components of said materials, said process comprising:
   a) delivering a first component of a first material and a first component of a second material at first and second regions on a substrate;
   b) delivering a second component of the first material and a second component of the second material at the first and second regions on the substrate;
   c) simultaneously reacting the delivered components in the regions to form at least two different materials wherein the materials are:
      inorganic materials, said inorganic materials preferably being selected from intermetallic materials, metal alloys, and ceramic materials; organometallic materials; or non-biological organic polymers, the process for the production of the array of non-biological, organic polymers further comprising
      (i) polymerizing the components in the regions of the substrate and
      (ii) allowing the polymerization reaction to proceed to form the at least two different non-biological organic polymers."
III. In the first-instance proceedings, as an annex to the summons to oral proceedings dated 1 September 2009, the opposition division issued a communication in which it expressed its preliminary opinion that the subject-matter of claim 1 as granted extended beyond the content of the application as filed, because its subject-matter had been broadened in a manner not unambiguously derivable from the application as filed.

The opposition division explained that the following features, which had originally been held essential to the preparation process of the non-biological organic polymers, were missing from the wording of that claim:

i) the monomer is delivered to predefined regions;

ii) an initiator is needed for the polymerising process.

In the same communication the opposition division also held that the subject-matter of claim 1 as granted lacked novelty over several prior-art documents.

On 5 November 2009, the proprietor announced that it was withdrawing its request for oral proceedings before the opposition division and that it would not be attending them.

With a communication dated 20 January 2010, the opposition division informed the parties that, in view of their written submissions, it intended to revoke the patent in its entirety, but that the oral proceedings would be held as planned. They were held on 9 February 2010 in the absence of all parties.
IV. In the contested decision, the opposition division confirmed its preliminary opinion that claim 1 as granted did not fulfil the requirements of Articles 123(2) and 54(1)(2) EPC. Regarding novelty, it stated in particular that the disclosure of at least six documents anticipated the subject-matter of claim 1 as granted, among them document:


The opposition division further held the amendments proposed in the respective claims 1 of auxiliary requests 1 to 9 to extend beyond the content of the application as filed. Further, it considered that the subject-matter of claims 1 of auxiliary requests 1 and 2 lacked novelty over the disclosure of inter alia document P08.

V. With the statement of grounds of appeal dated 27 July 2010, the patent proprietors (hereinafter "the appellants") contested the said decision and submitted thirteen sets of amended claims as auxiliary requests 1 to 13.

VI. With letters dated 8 December 2010 and 9 February 2011, respectively, opponents/respondents 5 and 4 requested the board not to admit into the appeal proceedings the sets of claims that had not been filed in the first instance, on the grounds that they constituted an abuse of procedure by the appellants.
VII. In response to the summons to oral proceedings before the board, the opponents/respondents 1 to 5 announced that they would not be attending them.

VIII. With letter dated 26 February 2013, the appellants declared that they withdrew their request for oral proceedings and that they would not be attending them.

IX. On 11 April 2013, the board informed the parties that the oral proceedings appointed for 16 April 2013 were cancelled.

X. From the written submissions of the parties, the requests are established as follows:

The appellants request that the decision under appeal be set aside and that the patent be maintained as granted or, alternatively, on the basis of the claims according to one of auxiliary requests 1 to 13 dated 27 July 2010.

The respondents 1 to 6 request that the appeal be dismissed.
Reasons for the Decision

1. Main request

1.1 In the board's view, claim 1 as granted lacks novelty in the following respects:

1.1.1 Document P08 (page 965, right column, point 2 "Implementation of the "multiple-sample concept""") discloses a method for synthesising nearly complete binary or ternary solid systems in one experiment. In particular, the synthesis of binary systems is carried out using a radiofrequency co-sputtering technique equipped with a device (shown in Figure 2)

![Figure 2 Schematic arrangement for co-sputtering of two-component systems.](image)

comprising a target consisting of two sectors of different materials A and B placed on the radiofrequency cathode and a substrate consisting of a flat plate placed parallel to the surface of the target and perpendicular to the A-B interface. The binary material is deposited in the form of a narrow strip the composition of which varies continuously along the
length of the substrate (P08; left column at page 966). Examples of binary systems thus synthesised are co-sputtered Mo-Nb binary alloys, Ag-Al$_2$O$_3$ cermets or Mo-Mg superconductors (Figures 4, 6 and 7 of P08).

1.1.2 The board notes that claim 1 as granted gives the impression that four distinct components (a first component of a first material; a first component of a second material; a second component of the first material; a second component of the second material) are required for carrying out the process claimed. A careful reading of dependent claims 10 and 11 shows that this is not the case, since provided that the components are delivered in different amounts, the first component of the first and second materials can be the same, and the second component of the first and second materials can also be the same. This is exactly what happens with the co-sputtering process disclosed in document P08, since the layer of co-sputtered binary material deposited by means of this process has a composition which varies continuously along the length of the substrate.

1.1.3 It follows from the above that the subject-matter of claim 1, at least in its version wherein metal alloys or ceramic materials are produced, is not novel over document P08.

1.1.4 The appellants argued that claim 1 was novel because document P08 did not disclose substrates with predefined regions which could each be used for the formation of a selected individual material.
The board cannot accept this argument because claim 1 does not require the presence of the above distinguishing feature, just a "first region" and a "second region". In P08, this requirement is fulfilled in particular by the substrate seen on Figure 2, since one end of the substrate can be seen as the "first region" and the other end as the "second region". So, even if the process according to P08 provides for a material the composition of which varies continuously along the length of the substrate, a "first region" and a "second region" can be identified on the substrate used in the process according to P08, which thus destroys the novelty of the subject-matter of claim 1, which therefore is not allowable under Article 54(1) and (2) EPC.

1.2 In the board's view, claim 1 as granted also fails to fulfil the requirements of Articles 100(c) and 123(2) EPC, for the reasons given by the opposition division in the contested decision.

1.3 It follows from the above that claim 1 of the main request fails to meet the requirements of the EPC; the main request is therefore rejected in its entirety.

2. **Auxiliary requests 1 to 13 - admissibility**

According to Article 12(4) RPBA, a board has the power to hold inadmissible facts, evidence or requests which could have been presented in the first instance proceedings. In the present case, the board makes use of this power and decides not to admit into the appeal proceedings the thirteen auxiliary requests submitted with the grounds of appeal for the following reasons.
2.1 Claim 1 of each of the thirteen auxiliary requests contains *inter alia* the amendment that the process for the production of non-biological, organic polymers comprises the feature "(i) adding an initiator to each region on the substrate", which amendment is supposed to overcome the objection under Article 123(2) EPC that the opposition division raised in its decision to revoke the contested patent.

2.2 As summed up in point III above, in the first-instance proceedings the patent proprietor had several opportunities to submit the above amendment before the final decision. It however deliberately decided not to file any amendment before the oral proceedings, despite the two communications in which it had been informed that the subject-matter of claim 1 as granted extended beyond the content of the application as filed, in particular because the feature that an initiator was added was missing from the wording of that claim.

The patent proprietor also, by deciding not to attend the oral proceedings, deliberately chose not to avail itself of the third opportunity to defend its position and overcome the objection raised by the opposition division.

2.3 In such a context, in which added subject-matter held unallowable during opposition proceedings was not removed at least by way of an auxiliary request filed in those proceedings, but only by way of a request filed during the appeal proceedings, a request can be held inadmissible under Article 12(4) RPBA (see in particular decision T 0144/09, catchword and point 1.4 of the reasons).
2.4 In the present case it follows that since the amendment proposed for overcoming the objection could manifestly have been presented in the first-instance proceedings, the board makes use of its discretionary power and, according to Article 12(4) RPBA, holds inadmissible all the requests containing this amendment, i.e. auxiliary requests 1 to 13.

3. As none of the appellants' requests can be allowed, the decision under appeal cannot be set aside.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: K. Boelicke

The Chairman: G. Raths