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**Datasheet for the decision  
of 3 June 2014**

**Case Number:** T 2289/09 - 3.4.03

**Application Number:** 06755172.1

**Publication Number:** 1883947

**IPC:** H01J37/32

**Language of the proceedings:** EN

**Title of invention:**  
HF- PLASMA SOURCE WITH PLURALITY OF OUT - OF- PHASE ELECTRODES

**Applicant:**  
Dublin City University

**Headword:**

**Relevant legal provisions:**  
EPC R. 137(5)

**Keyword:**  
Unity of invention - unsearched subject-matter

**Decisions cited:**  
G 0002/92

**Catchword:**



**Beschwerdekammern  
Boards of Appeal  
Chambres de recours**

European Patent Office  
D-80298 MUNICH  
GERMANY  
Tel. +49 (0) 89 2399-0  
Fax +49 (0) 89 2399-4465

Case Number: T 2289/09 - 3.4.03

**D E C I S I O N**  
**of Technical Board of Appeal 3.4.03**  
**of 3 June 2014**

**Appellant:** Dublin City University  
(Applicant) Glasnevin  
Dublin 9 (IE)

**Representative:** Moore, Barry  
Hanna Moore & Curley  
13 Lower Lad Lane  
Dublin 2 (IE)

**Decision under appeal:** **Decision of the Examining Division of the European Patent Office posted on 3 July 2009 refusing European patent application No. 06755172.1 pursuant to Article 97(2) EPC.**

**Composition of the Board:**

**Chairman** G. Eliasson  
**Members:** V. L. P. Frank  
T. Bokor

## Summary of Facts and Submissions

- I. This is an appeal against the refusal of European patent application No. 06 755 172 for the reason *inter alia* that the claims contained unsearched subject-matter which did not combine with the originally claimed group of inventions to form a single general inventive concept (Rule 137(5) EPC, previously Rule 137(4) EPC, previously Rule 86(4) EPC 1973).
- II. As final request on appeal the applicant requested in writing that the decision under appeal be set aside and that a patent be granted on the basis of claims 1-8 filed with letter dated 4 November 2013 as sole request.
- III. Claim 1 of this request reads as follows:
- "1. A plasma source (100) comprising  
a plasma excitation region (110),  
a plasma exciting reactive impedance element (105),  
a reference electrode (115),  
a high frequency generator (125), wherein  
the plasma exciting reactive impedance (*sic*) element (105) includes a plurality of electrodes (105a, 105b, 105c, 105d) provided adjacent to and above the plasma excitation region (110),  
the reference electrode (115) is provided below the plasma excitation region (110),  
the high frequency generator (125) is operable in the 10MHz - 300 GHz range, and the electrodes forming the reactive impedance element (105) are coupled to the high frequency generator (125) and are arranged to be operated such that adjacent electrodes of the plurality of electrodes are out

of phase with one another such that any current introduced by a first electrode of the plurality of the electrodes (105a, 105b, 105c, 105d) is substantially cancelled by a second electrode of the plurality of the electrodes (105a, 105b, 105c, 105d), thereby reducing the net current introduced into the plasma excitation region,

the plasma source being characterised in that:

the plasma source (100) further comprises a lower frequency generator operable in the 75-460 kHz range, and in that

the electrodes of the reactive impedance element (105) being additionally coupled to the lower frequency generator, wherein a selected number of the electrodes (105a, 105b, 105c, 105d) coupled to the lower frequency generator are arranged to be operated in a common mode while selected others of the electrodes coupled to the lower frequency generator are operable in a differential mode."

IV. In the International Search Report (ISR), carried out by the EPO acting as International Search Authority (ISA), the authorized officer stated that the original claims related to twelve different group of inventions. As only some of the required additional search fees were timely paid by the applicant, the ISR covered only those claims for which fees were paid, namely claims 1-3, 20-26 and 36-40, defining the 1<sup>st</sup>, 6<sup>th</sup> and 9<sup>th</sup> groups of inventions (see ISR, Box III).

Original claims 1, 6-16 and 47-56 were found to belong to the 4<sup>th</sup> group of inventions.

The lack of unity objection was further reaffirmed in the Written Opinion (WO) of the ISA (see WO, Item IV). Only the claims corresponding to the 1<sup>st</sup>, 6<sup>th</sup> and 9<sup>th</sup>

group of inventions were examined, as only those search fees had been paid.

V. The examining division essentially argued in the decision under appeal that:

- The main request did not comply with the requirements of Rule 137 (4) EPC, since the feature "*the plurality of electrodes forming the reactive impedance element being coupled ... additionally to a low frequency generator*" was a combination of additional technical features contained in original claims 6 and 7 that, according to the WO of the ISA, belonged to the 4<sup>th</sup> group of inventions of the corresponding PCT application and thus to unsearched subject-matter that was not linked with the searched groups such as to form a single general inventive concept. Similarly, the feature "*the low frequency generator is operable in a common mode configuration and includes multiple low frequency generators*", was based on original claims 8 and 12, that also formed part of the unsearched 4<sup>th</sup> group of inventions.
- The applicant had argued that the subject-matter of claim 1 would correspond to the subject-matter of a combination of searched claims of European patent application EP06123896 and therefore would not be unsearched subject-matter, but would comply with the provisions of Rule 137 (4) EPC.
- The applicant's argumentation with respect to Rule 137 (4) EPC could not be accepted, since European patent application EP06123896 - even though disclosing similar subject-matter - was filed

independently from the present application. Rule 137 EPC, which concerns amendments of the European patent application, stipulated clearly in paragraph (4) that the search of amendments was carried out in the context of the application under consideration, but not in the one of any other application. Hence, having regard to Rule 137 (4) EPC and decision G 2/92, the introduction of the subject-matter referred to above was not allowable, as the examination could be carried out only on subject-matter covered by the international search report.

VI. The appellant argued in writing essentially as follows:

- Since the filing of the appeal, the applicant had secured the grant of a divisional patent. The new main request was based on the claims as granted in the divisional application which evidently had been searched and found to be novel and inventive.
  
- According to Rule 137(5) EPC, first sentence, there were two requirements for subject-matter to be precluded from amendment in an instant application: a) that it was **unsearched**; and b) that the reason it was unsearched was that it did not **combine with the originally claimed invention or group of inventions to form a single general inventive concept**. The subject-matter of the present claims of the instant application was however searched, since the subject-matter of these claims was searched in the now granted divisional application. Hence the second clause (highlighted in bold above) was predicated on the amendment being directed to unsearched subject-matter. If the subject-matter had been searched,

then the second clause did not apply. That is, amendment to subject-matter that had been searched did not have to combine with the originally claimed invention or group of inventions to form a single general inventive concept. This reading of the rule was consistent with current practice at the EPO regarding unity and requests for additional search fees. If an applicant was presented with a unity of invention objection which required the payment of additional search fees and the applicant paid the additional search fees, then the applicant was entitled during prosecution to amend to the features of any of the searched material. Rule 137(5) made no reference to the timing of the search, simply that amended claims should have been searched. The EPO already conceded that a search of subject-matter, once conducted, constituted a search of that subject-matter evermore. The EPO specifically provided for the 100% refund of search fees if they acknowledged that the subject-matter had already been searched in the parent application. It was accepted practice that amendment in a divisional application could be based on subject-matter that was searched in the parent application. For the same reason, it was submitted that it should be accepted that subject-matter that had been searched in a divisional application was considered searched subject-matter generally and could thus form the basis for amendment in a parent application. The applicant should be allowed to base an amendment in the instant application based on a search conducted on the related divisional application.

- Decision G2/92 stated: *"An applicant who fails to pay the further search fees for a non-unitary application when requested to do so by the Search Division under Rule 46(1) EPC cannot pursue that application for the subject-matter in respect of which no search fees have been paid. Such an applicant must file a divisional application in respect of such subject-matter if he wishes to seek protection for it."* The second clause of the first sentence made clear that the applicant could not pursue that application for the subject-matter in respect of which no search fees had been paid. The EBA however made no statement as to whether that subject-matter could not be pursued in the instant application, simply that one could not pursue subject-matter in respect of which search fees had not been paid. In the present case the corresponding search fees had indeed been paid - they were paid in the divisional application. Furthermore, the applicant clearly followed the direction of the second sentence of the headnote in filing the divisional application - this was the mechanism through which the subject-matter became searched. Thus, the specific circumstances of the present case were not explicitly excluded by the conditions set out in the two sentences of the opinion of the Enlarged Board as set out above and the circumstances of the present case were also compatible with and were not specifically excluded by the wording of present Rule 137(5) EPC and its predecessor Rule 86(4) to which the Enlarged Board referred in G2/92. The applicant should not be forced to file a further divisional application with associated cost to pursue a claim that had already been searched.



- In the event that the Board did not accept this position as correct there was a legitimate requirement for clarification of the law. In this scenario it was requested to refer the following questions to the Enlarged Board of Appeal:
  - 1. Is Rule 137(5) restricted to searches conducted in the instant application?
  - 2. In the event that the answer to Question 1 is in the negative, can an applicant in a parent application amend to subject-matter that was searched in a divisional application but not in the parent application?

VII. The Board summoned to oral proceedings and indicated its preliminary assessment of the case, giving reasons essentially corresponding to the reasons given in points 8 and 9 of this decision. The appellant's representative announced with letter dated 29 May 2014 that the appellant would not be represented at the oral proceedings.

Oral proceedings were held in the absence of the applicant, and the decision of the Board was announced at the end of the oral proceedings.

### **Reasons for the Decision**

1. The appeal is admissible.
2. The only issue in this appeal is that of the allowability of amendments. Amendments are regulated by Article 123 EPC. According to Article 1 of the Decision

of the Administrative Council of 28 June 2001 on the transitional provisions under Article 7 of the Act revising the European Patent Convention of 29 November 2000, Article 123 shall apply to European patent applications pending at the time of their entry into force. Rule 137 belongs to Chapter IV - "Amendments and corrections" and is titled "Amendments of the European patent application". It implements Article 123 EPC and thus entered into force at the same time.

Thus for deciding the present appeal the current version of Rule 137 EPC has to be applied.

3. Rule 137(5) EPC reads:

*"Amended claims may not relate to unsearched subject-matter which does not combine with the originally claimed invention or group of inventions to form a single general inventive concept. Nor may they relate to subject-matter not searched in accordance with Rule 62a or Rule 63."*

Rule 62a EPC concerns applications containing a plurality of independent claims and Rule 63 EPC to an incomplete search due to the impossibility of carrying out a meaningful search. Hence for this appeal only the first sentence of Rule 137(5) EPC is relevant.

4. Decision G 2/92 (OJ, 1993, 591) of the Enlarged Board of Appeal (EBA) deals with the consequences of non-payment of further search fees when an applicant is invited to do so by the search division. Its headnote reads:

*"An applicant who fails to pay the further search fees for a non-unitary application when requested to do so by the Search Division under Rule 46(1) EPC cannot pursue that application for the subject-matter in respect of which no search fees have been paid. Such an applicant must file a divisional application in respect of such subject-matter if he wishes to seek protection for it."*

5. The preamble of present claim 1 is based on originally filed claims 1-5 while its characterizing part is based on originally filed claims 6, 7 and 9. In the Written Opinion (WO) of the International Search Authority (ISA) the original claims were found to belong to twelve different group of inventions (see Item IV of the WO). Group 1 was formed by claims 1-3, group 2 by claims 1 and 4, group 3 by claims 1, 5 and 46, group 4 by claims 1, 6-16 and 47-56. Hence present claim 1 is formed of a combination of features belonging to the 1<sup>st</sup> to 4<sup>th</sup> group of inventions. From these four groups of inventions search fees were only paid for the first group. Hence the features of the 2<sup>nd</sup> to 4<sup>th</sup> group were not searched.
  
6. The appellant has not disputed that present claim 1 comprises features that were not searched by the search division when dealing with the present application. He contends that the subject-matter of present claim 1 was however searched when the EPO dealt with application EP 09 175 177, a divisional application of the present application. Hence, in his view, the requirement in Rule 137(5) EPC that amendments should not relate to unsearched subject-matter was fulfilled. This was consistent with EPO practice, since when a unity of invention objection which required the payment of additional search fees was raised and the applicant

paid the additional search fees, the applicant was entitled during prosecution to amend to the features of any of the searched material. Rule 137(5) made no reference to the timing of the search. As the EPO specifically provided for a 100% refund of search fees in a divisional application if the search division acknowledged that the subject-matter had already been searched in the parent application, it should be accepted that subject-matter that had been searched in a divisional application was considered searched subject-matter generally and could thus form the basis for amendment in a parent application.

7. He further argued that his reasoning was in line with decision G 2/92 which stated that one could not pursue subject-matter in respect of which no search fees had been paid. However, in the present case the required search fees were paid when pursuing the divisional application. Hence the specific circumstances of the present case were not explicitly excluded by the conditions set out in G 2/92 and were also compatible with and not specifically excluded by the wording of present Rule 137(5) EPC.
  
8. The Board does not agree with the appellant's reasoning. The EBA has clearly stated in decision G 2/92 that when an applicant fails to pay the requested search fees, that subject-matter cannot be pursued in the application for which the search was carried out. This holds independently of whether this subject-matter was later searched in a divisional application or in another application. The EBA stated furthermore in G 2/92 that *"In the view of the Enlarged Board...the invention which is to be examined...must be an invention in respect of which a search fee has been paid prior to the drawing up of the European search*

report" (point 2, reasons 3rd paragraph). This statement has significance also beyond the reasons given in decision G 2/92.

9. As already indicated in the summons to the oral proceedings, the appellant draws an erroneous conclusion from the fact that claims in divisional applications may benefit from an earlier search performed in the parent application. The appellant errs in believing that this is an unconditional right of an applicant, and therefore that it is also applicable in a different or "inverse" situation. When an applicant for a divisional application seeks the benefit of an earlier search, he still has to pay the search fees (Rule 36(3) EPC). These are then refunded, conditional on the fulfilment of certain criteria regulated in the applicable Decision of the President of the EPO and Notice from the EPO (see Special edition 1 of OJ EPO 2010, pages 322 and 325), both based on the powers of the president pursuant to Article 9(2) Rules relating to Fees (RRF). Thus first the applicant must pay a search fee, and only thereafter will the EPO proceed to examine if the conditions for a refund are given, namely whether the EPO benefits from the earlier search report (essentially whether the claims are the same as searched earlier). There is no legal provision that would permit the EPO to proceed with search activities, including the examination of the claims in question and their scope, hence the usefulness of an earlier search for the given claims, when no search fees were paid for a given part of an application, and this is the case here. Furthermore, there is also no legal provision that would entitle the examining division in the present procedural situation to request the payment of further search fees, for the purpose of examining the usefulness of the earlier search performed in the

divisional application which the applicant wishes to rely on. Obviously, there is also no provision which would then permit the appropriate refund in an analogous manner as outlined in the Decision of the President of the EPO (supra).

10. The appellant did not comment on the above assessment of the Board.
  
11. The appellant has requested that two questions be referred to the EBA in the event that his arguments could not be followed by the Board (see point VI above). The Board however sees no reasons for referring these questions to the EBA, since it had no difficulty in deciding the case before it and is furthermore not aware of any other decisions of the Boards of Appeal on this issue which could lead to a non-uniform application of the law.

**Order**

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

The appeal is dismissed.

The Registrar:

The Chairman:



S. Sánchez Chiquero

G. Eliasson

Decision electronically authenticated