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**Datasheet for the decision
of 8 May 2009**

Case Number: T 1346/08 - 3.3.06

Application Number: 05817939.1

Publication Number: 1796830

IPC: B01J 19/12

Language of the proceedings: EN

Title of invention:
Microwave chemical reactor

Applicant:
CNR Consiglio Nazionale Delle Ricerche

Opponent:
-

Headword:
Microwave reactor/CNR

Relevant legal provisions:
-

Relevant legal provisions (EPC 1973):
EPC Art. 113(1), 109(1), 67

Keyword:
"Procedural violation (yes)"

Decisions cited:
-

Catchword:
-



Case Number: T 1346/08 - 3.3.06

D E C I S I O N
of the Technical Board of Appeal 3.3.06
of 8 May 2009

Appellant: CNR Consiglio Nazionale Delle Ricerche
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Decision under appeal: Decision of the Examining Division of the
European Patent Office posted 8 April 2008
refusing European application No. 05817939.1
pursuant to Article 97(2) EPC.

Composition of the Board:

Chairman: P.-P. Bracke
Members: E. Bendl
U. Tronser

Summary of Facts and Submissions

I. The appeal is against the decision of the Examining Division to refuse the European patent application 05817939.1.

II. Upon entry into the European regional phase the Applicant submitted a new set of claims and commented on novelty and inventive step of the claimed subject-matter. Claim 1 read as follows:

"1. Microwave heating apparatus (1) for chemical-physical processes comprising:

- a microwave source (4),
- a reaction container (3) in which a reacting material (25) is arranged,
- means for transferring the microwaves generated by the microwave source (4) to said reacting material (25),
- wherein said means for transferring comprises at least one antenna (10) which has at an end a connector that connects operatively said antenna to said microwave source, and at the other end a microwave emitter suitable for irradiating said reacting material,

characterised in that

said antenna is of co-axial type having:

- an inner conductor,
- a dielectric that coats said inner conductor for all its length,
- an outer conductor that covers coaxially said dielectric except from an end portion;

and in that

- said means for transferring are arranged directly in said reaction container."

III. In the Examining Division's first official communication an objection with regard to lack of inventive step of the subject-matter of Claim 1 was raised. It was concluded that the disclosure of any of the documents

D1 = US-A-5304766

D2 = US-A-6403939

D3 = DE-U-9421652

would render the subject-matter of Claim 1 obvious when combining with the teaching of document

D4 = US-A-4460814.

It was in particular explained that the difference between the teaching of documents D1-D3 and the subject-matter of Claim 1 is to be seen in the constructive details of the coaxial antenna, and that the use of such an antenna would be an obvious choice.

The Examining Division considered Applicant's arguments concerning the direct positioning of the antenna in the reactor as not convincing and regarded the apparatus according to Claim 1 as an obvious aggregation of features.

IV. With his reply dated 21.12.07 the Applicant commented on the objections raised, discussed documents D1-D4 and submitted an amended Claim 1, which read as follows:

- "1. Microwave heating apparatus (1) for chemical-physical processes comprising:
- a microwave source (4),
 - a reaction container (3) in which a reacting material (25) is arranged,
 - means for transferring the microwaves generated by the microwave source (4) to said reacting material (25),
 - wherein said means for transferring comprises at least one antenna (10) which has at an end a connector that connects operatively said antenna to said microwave source, and at the other end a microwave emitter suitable for irradiating said reacting material,
- wherein said antenna (10) is of co-axial type having:
- an inner conductor,
 - a dielectric that coats said inner conductor for all its length,
 - an outer conductor that covers coaxially said dielectric except from an end portion;
- and
- said antenna (10) is arranged directly in said reaction container,

characterised in that

said reaction container has an aperture (6, 6a, 6b, 6c) and said antenna (10) is put in said reaction container (3) through said aperture (6, 6a, 6b, 6c)."

- V. The next official action of the Examining Division was the refusal of the application in accordance with Article 97(2) EPC, concluding that Claim 1 did not meet

the requirements of Article 56 EPC. This decision was posted on 08.04.08.

- VI. The Notice of Appeal including the grounds of appeal, was received on 11.06.08, the appeal fee was received the same day.
- VII. The Appellant requests the decision under appeal to be set aside, remittal of the case back to the Examining Division and reimbursement of the appeal fee. His initial request for oral proceedings was withdrawn **for the appeal proceedings.**

Reasons for the Decision

1. In order to overcome the objection of the Examining Division raised in the only official communication, the Appellant submitted arguments concerning the inventive step, discussed documents D1-D4 and filed an amended Claim 1, which contained the additional feature "said reaction container has an aperture (6, 6a, 6b, 6c) and said antenna (10) is put in said reaction container (3) through said aperture (6, 6a, 6b, 6c)".
2. It has to be analysed whether this can be regarded as a **bona fide** reply under the circumstances described above. To answer this question Examining Division's objections and the entire information communicated to the Applicant prior to his reply have to be examined.
 - 2.1 Prior to the European phase, in the Written Opinion issued in the course of the PCT procedure, documents D1-D3 were cited with regard to novelty of the subject-

matter of Claim 1. However, **no specific passages** were mentioned.

- 2.2 In the first (and only) communication of the Examining Division prior to the decision reference to D1-D3 was again made only in very general terms, **without citing specific passages.**

The Applicant's attention was drawn to the fact that the constructive details of the antenna represent the only difference between the subject-matter of Claim 1 on file and the disclosures of D1-D3. Given the general knowledge represented by D4 (in particular by Fig. 3), this difference was regarded as obvious. The subject-matter of Claim 1 at that time was only regarded as an obvious aggregation of features.

3. Thus, an inventive step objection had been raised, but **no specific passages** of the prior art documents D1-D3 were cited by the Examining Division, the **closest prior art** document was not identified and the objections were only raised in very **general terms**. Based on this vague information the Appellant

- (i) submitted an amended Claim 1, which contained an **additional feature**, that was not discussed by the Examining Division so far,
- (ii) gave **reasons** why he regarded the additional feature suitable to establish an inventive step,
- (iii) discussed the **arguments** of the Examining Division,
- (iv) discussed the **prior art** disclosures.

Without any doubt, the attempt to introduce claims with an additional feature, which - in the Appellant's opinion - is suitable to establish an inventive step and the filing of further arguments supporting this point of view can in this case be regarded as a serious attempt to overcome the objections raised, in spite of the vague information given to the Applicant about the objection raised. Appellant's reply has therefore to be seen as a **bona fide** answer.

4. The Applicant could not have expected the immediate refusal of the application after this reply. He was not made aware by the Examining Division that the argumentation provided and the amendments filed still were not considered suitable to overcome the objections raised. Consequently he was taken by surprise (Article 113(1) EPC 1973).
5. Furthermore, the Examining Division should have re-considered its position after having received the Notice of Appeal (Article 109(1) EPC 1973), but decided not to make an interlocutory revision.
6. The steps taken by the Examining Division represent a substantial procedural violation. The requested refund of the appeal fee is consequently considered to be justified (Rule 67 EPC 1973).
7. The Board, not wishing to deprive the party of a first instance consideration on the question whether the application meets the requirements of the EPC, therefore exercises its discretion under Article 111(1) EPC 1973, and remits the case to the department of first instance for further examination.

Order

For these reasons it is decided that:

1. The decision of the Examining Division is set aside.
2. The case is remitted back to the Examining Division for further examination of the application on the basis of the set of claims as submitted with the Appellant's letter dated 11.06.08.
3. Reimbursement of the appeal fee is ordered.

The Registrar:

The Chairman:

G. Rauh

P.-P. Bracke