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**Datasheet for the decision  
of 3 May 2007**

**Case Number:** T 0003/06 - 3.4.01

**Application Number:** 92900210.3

**Publication Number:** 0555376

**IPC:** G21K 1/00

**Language of the proceedings:** EN

**Title of invention:**

Device for controlling radiation and uses thereof

**Patentee:**

X-RAY OPTICAL SYSTEMS, INC.

**Opponents:**

Bruker AXS Analytical X-Ray Systems GmbH (withdrawn)  
Kumakhov M.A.  
Koninklijke Philips Electronics N.V. (withdrawn)

**Headword:**

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**Relevant legal provisions:**

EPC Art. 99(1), 123(2), 112(1)(a)  
RPBA Art. 10b

**Keyword:**

"Admissibility of the opposition by opponent 02 (yes)"  
"Admissibility of late-filed requests (yes)"  
"Added subject-matter (yes, in all requests)"  
"Referral of questions to the Enlarged Board of Appeal (rejected)"

**Decisions cited:**

G 0009/93, G 0003/97, T 0296/96, T 0040/97

**Catchword:**

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Case Number: T 0003/06 - 3.4.01

**D E C I S I O N**  
of the Technical Board of Appeal 3.4.01  
of 3 May 2007

**Appellant:** Kumakhov M.A.  
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**Decision under appeal:**

**Interlocutory decision of the Opposition  
Division of the European Patent Office posted  
19 October 2005 concerning maintenance of  
European patent No. 0555376 in amended form.**

**Composition of the Board:**

**Chairman:** B. Schachenmann  
**Members:** H. Wolfrum  
R. Bekkering  
W. Sekretaruk  
G. Assi

## Summary of Facts and Submissions

I. Three oppositions had initially been filed against European patent No. 0 555 376. An interlocutory decision of the opposition division was dispatched on 19 October 2005 maintaining the patent in amended form.

Appeals were lodged against this decision by the patentee and by the sole remaining opponent 02.

The patentee's notice of appeal was received on 28 December 2005 and the prescribed fee was paid on the same day. On 26 February 2006 a statement of grounds of appeal was filed.

On 22 December 2005 notice of appeal was received from opponent 02 and the prescribed fee was paid on the same day. A statement of grounds of appeal was filed on 24 February 2006.

II. According to corresponding requests, the parties were summoned to oral proceedings by a notification dated 9 January 2007.

In a communication dated 14 February 2007 the Board of Appeal addressed briefly the relevant issues to be discussed, concerning *inter alia* the questions of admissibility of the opposition by opponent 02 and of added subject-matter (Article 123(2) EPC).

III. In response thereto, the patentee filed by letter of 2 April 2007 amended patent documents including new claim versions according to a main request and four auxiliary requests. Moreover, the patentee objected to

the admissibility of the opposition filed by opponent 02 being the inventor of the present patent and proposed several questions to be referred to the Enlarged Board of Appeal.

- IV. Oral proceedings were held on 3 May 2007.
- V. The appellant (patentee) requested that the decision under appeal be set aside, that the opposition of opponent 02 be rejected as inadmissible, and that the patent be maintained in amended form based, as main request, on the set of claims 1 to 17 labelled "Auxiliary request I" and dated 3 May 2007, or based on one of the following auxiliary requests:

first auxiliary request: claims 1 to 55, dated 2 April 2007 and labelled "Auxiliary request IV";

second auxiliary request: claims 1 to 61, dated 2 April 2007 and labelled "Auxiliary request II";

third auxiliary request: claims 1 to 17, dated 3 May 2007 and labelled "Auxiliary request III";

fourth auxiliary request: claims 1 to 15, dated 3 May 2007 and labelled "Auxiliary request IIIA".

Furthermore, the patentee requested a referral of several questions to the Enlarged Board of Appeal. Of

these only the following questions are pertinent to the issues decided in the present decision:

*"Is an opposition filed by the named inventor admissible?" and "Does the combination of features of at least two embodiments violates [sic!] Article 83 EPC and/or Article 123(2) EPC if nothing points to the contrary?"*

VI. The other appellant (opponent 02) requested that the decision under appeal be set aside and the patent be revoked in its entirety.

VII. Claim 1 of the patentee's **main request** reads as follows:

*"1. A device (100) for controlling radiation in the form of X-ray or gamma-ray beams or beams of neutrons, ions, or other charged particles, the device comprising a plurality of channels having input butt-ends (104) capturing the radiation, inner surfaces exhibiting multiple total external reflections and output butt-ends (106) emitting the radiation, said channels being formed by tubular channel-forming elements (13, 113) located along generatrices of imaginary controlled barrel-shaped coaxial surfaces, said tubular channel-forming elements (13, 113) being spatially located with a rigid honeycomb support structure, the tubular channel-forming elements being rigidly linked to one another by the rigid honeycomb support structure, each of said tubular channel-forming elements comprising a bundle of capillaries,*

*each bundle of capillaries (13, 113) being a plurality of interconnected capillaries, characterised in that*

- *the rigid honeycomb support structure is formed by the walls of the bundles of capillaries rigidly fitted to one another by their external surfaces, and*
- *the channel width of each channel is variable along the length of the channel."*

Claims 2 to 9 are dependent claims. Further claims (claims 10 to 17) are directed to an X-ray lithography system, an analytic instrument, and a medical system, each comprising a device of any of the claims 1 to 9.

Claim 1 of the patentee's **first auxiliary request** reads as follows:

*"1. A device (100) for controlling radiation in the form of X-ray or gamma-ray beams or beams of neutrons, ions, or other charged particles, the device comprising a plurality of channels having input butt-ends (104) capturing the radiation, inner surfaces exhibiting multiple total external reflections and output butt-ends (106) emitting the radiation, said channels being formed by tubular channel-forming elements (13, 113) located along generatrices of imaginary controlled surfaces, characterised in that*

- *said tubular channel-forming elements (13, 113) are spatially located with a rigid honeycomb support structure,*
- *the tubular channel-forming elements are rigidly linked to one another by the rigid honeycomb support structure,*

- *the rigid honeycomb support structure is formed by the walls of the tubular channel-forming elements rigidly fitted to one another by their external surfaces,*
- *each of said tubular channel-forming elements comprises a bundle of capillaries,*
- *each bundle of capillaries (13, 113) is a plurality of interconnected capillaries, and*
- *the channel width of each channel is variable along the length of the channel."*

Claims 2 to 40 are dependent claims. Further claims (claims 41 to 55) are directed to an X-ray lithography system, an analytic instrument, a medical system, and an energy-selective radiation filter, each comprising a device of any of the claims 1 to 40.

Patentee's **second auxiliary request** comprises three independent claims 1, 2 and 3 directed to a device for controlling radiation, of which claim 2 is very similar to claim 1 of the first auxiliary request from which it differs in substance in that it does not require the rigid support structure to be a honeycomb structure and to be formed by the walls of the tubular channel-forming elements rigidly fitted to one another by their external surfaces.

Claims 4 to 46 are dependent claims. Further claims (claims 47 to 61) are directed to an X-ray lithography system, an analytic instrument, a medical system, and an energy-selective radiation filter, each comprising a device of any of the claims 1 to 46.



Claim 1 of the patentee's **third auxiliary request** reads as follows:

*"1. A device for controlling radiation in the form of X-ray or gamma-ray beams or beams of neutrons, ions, or other charged particles, the device comprising a plurality of channels having input butt-ends capturing the radiation, inner surfaces exhibiting multiple total external reflections and output butt-ends emitting the radiation, said channels being formed by tubular channel-forming elements located along generatrices of imaginary controlled barrel-shaped coaxial surfaces, said tubular channel-forming elements being spatially located with a rigid honeycomb support structure, the tubular channel-forming elements being rigidly linked to one another by the rigid honeycomb support structure, each of said tubular channel-forming elements comprising a bundle of capillaries, characterised in that*

*- the rigid honeycomb support structure is formed by a compound filling gaps between the bundles of capillaries."*

Claims 2 to 9 are dependent claims, with claim 3 requiring the channel width of each channel to be variable along the length of the channel. Further claims (claims 10 to 17) are directed to an X-ray lithography system, an analytic instrument, and a medical system, each comprising a device of any of the claims 1 to 9.

The claims of patentee's **fourth auxiliary request** are identical to those of the third auxiliary request except for the deletion of two dependent claims comprising features which relate to a variable width of the channels.

## **Reasons for the Decision**

1. The appeals of both parties comply with the requirements of Articles 106 to 108 and Rule 64 EPC and are, therefore, admissible.
2. Admissibility of the opposition filed by opponent 02
  - 2.1 According to the patentee, opponent 02 as the inventor could not validly file an opposition even if the plain language definition of "any person" in Article 99(1) EPC did not prevent inventors from filing an opposition. The ruling in G 9/93, which eliminated patent proprietors from the definition of "any person", should be updated to exclude, in the present circumstances, also the inventor for the following reasons:
    - Opponent 02 as the inventor of the present patent initially cooperated openly and eagerly with the patentee in the preparation of the US and European patent applications.
    - He received for his services, and still retained, a significant share of ownership (17%) in the patent proprietor. Through his stock ownership, opponent 02 fell within the definition of "patent proprietor" in this opposition. Judging opponent 02 a separate legal

entity from the patent proprietor led to the curious result that, although a patent proprietor was barred from filing an opposition, a separate person holding a significant share was not barred and thus could bypass the ruling of G 9/93 by lodging the desired opposition himself, rather than through the barred patent proprietor.

- Opponent 02 assigned all his rights in the subject inventions to the patent proprietor in five contemporaneous 1990 patent assignment contracts. In each of these contracts, the opponent specifically covenanted "*to generally do everything possible which (the Patent Proprietor) shall consider desirable for aiding in securing, maintaining and enforcing proper patent protection for said inventions and for vesting title to said inventions and all applications for patents or related foreign rights and all patents on said inventions, in (the Patent Proprietor)*". By initiating and maintaining the present opposition, opponent 02 was in direct violation of these written, signed assignment contracts.

- Opponent 02 also owed a "fiduciary duty" to the patentee based on his level of ownership. By opposing the patent in these proceedings, opponent 02 was breaching that fiduciary duty.

- Moreover, opponent 02 possessed a high degree of knowledge in the field evidenced by his authorship of most if not all of the documents cited against the patent in this proceedings.

In summary, when a significant shareholder, with special knowledge, challenged a patent in which he was an inventor, there existed the possibility that there was not the contentious proceedings required by G 9/93. Moreover, in view of additional factors, such as a written no-challenge obligation, and/or a fiduciary duty, and/or an inconsistent position since patent filing, exclusion of the inventor as opponent from the definition of "any person" was amply justified.

- 2.2 Opponent 02 submitted that there was no indication that he would act on behalf of the patent proprietor. Also, there was no indication that the minor percentage of shares owned by him gave him any control over the patent proprietor. Therefore, the opposition filed did not circumvent any regulation of the EPC in the sense of G 3/97 or bypass the rulings of G 9/93.

Moreover, there was no basis in the EPC for excluding opponent 02 from opposing the patent only because of an alleged contractual relationship so that there was no room in the present proceedings for investigating the contractual relationship between the patent proprietor and opponent 02.

- 2.3 According to decision G 9/93 (OJ 1994, 891) of the Enlarged Board of Appeal, the expression "any person" in the phrase of Article 99 EPC "*any person may give notice to the European Patent Office of opposition to the European patent granted*" does not include the patent proprietor. This interpretation of law was justified by the procedural principle that opposition proceedings under the EPC are to be considered contentious proceedings between parties normally

representing opposing interests, *ie* that they constitute *inter partes* proceedings.

In decision G 3/97 (OJ 1999, 245), the Enlarged Board of Appeal confirmed this view and asserted that, for an opposition to be admissible, the person filing an opposition must be identifiable and the proceedings must be contentious *inter partes* proceedings (see *eg* points 2.1 and 4.1 of the Reasons for the Decision). It was expressly held that the EPC did not specify any further formal requirements to be met by an opponent. For the purpose of the opposition procedure, *ie* to prevent the maintenance of clearly invalid patents, by making it possible to institute proceedings before the EPO itself, it did not matter who provided the EPO with the relevant information (*ibid.* point 3.2.2). Withholding the legal entitlement to opposition from anyone required a particular justification (*ibid.* point 5.). Only a circumvention of the law by abuse of process, such as for instance an opposition filed by a straw man acting on behalf of the patent proprietor, rendered an opposition inadmissible (*ibid.* headnotes 1(b) and 1(c)). In this context, the Enlarged Board of Appeal specifically considered the case of an opponent infringing as licensee an existing no-challenge agreement and held that such an agreement did not render an opposition inadmissible (*ibid.* point 3.3.2).

- 2.4 In the present case, the patent proprietor and the opposing inventor are different persons. Although opponent 02 is a shareholder of the patent proprietor, he is not an executive of this company and it was not submitted that he had any substantial influence on

commercial and judicial decisions concerning the business of the patent proprietor. In particular, as far as the right to the present patent is concerned, the patent assignment contracts referred to by the patent proprietor constitute evidence for the fact that this right is exclusively in the latter's possession.

Moreover, the conduct of the opposition and appeal proceedings by both parties demonstrates that the present proceedings are clearly contentious.

For these reasons, the hypothetical possibility of an abuse of law by the inventor cooperating with the patent proprietor can be ruled out. Thus, the board considers the conditions laid down by the Enlarged Board of Appeal for an admissible opposition by "any person" to be met by the opposition of opponent 02.

The fact that opponent 02 as the inventor possesses a high degree of knowledge in the field of the invention is irrelevant for the issue whether he is formally entitled to file an opposition.

Finally, as regards the alleged infringement by the inventor of contractual agreements or a fiduciary duty, this matter relates to the internal relationship between the parties and as such has no bearing on the present opposition and appeal proceedings.

- 2.5 For the reasons given above, the board comes to the conclusion that the opposition of opponent 02 is admissible.

- 2.6 The patentee requested to refer to the Enlarged Board of Appeal the question whether an opposition filed by the named inventor is admissible.
- 2.6.1 According to Article 112(1) (a) EPC, a board shall refer a question to the Enlarged Board of Appeal if it considers that a decision is required in order to ensure uniform application of the law or if an important point of law arises.
- 2.6.2 None of these prerequisites is met in the present case. The board's finding concerning the admissibility of the opposition by opponent 02 is based on the rulings of the Enlarged Board of Appeal in its decisions G 9/93 and G 3/97, which provide sufficient guidance to decide the case at issue. In this context, the question of whether the opposition of an inventor aims at circumventing the law, in that the inventor acts as a straw man on behalf of the patent proprietor, or whether it constitutes a contentious proceedings between different legal or natural persons does not concern a point of law but is a matter of facts to be evaluated on the basis of the specific circumstances of a given case.
- 2.6.3 For these reasons, the request for referral to the Enlarged Board of Appeal cannot be allowed.
3. Admissibility of late-filed requests (Article 10b RPBA)
- 3.1 According to Article 10b (1) RPBA "Any amendment to a party's case after it has filed its grounds of appeal or reply may be admitted and considered at the Board's discretion. The discretion shall be exercised in view

of inter alia the complexity of the new subject-matter submitted, the current state of the proceedings and the need for procedural economy."

Article 10b (3) RPBA complements that "*Amendments sought to be made after oral proceedings have been arranged shall not be admitted if they raise issues which the Board or the other party or parties cannot reasonably be expected to deal with without adjournment of the oral proceedings.*"

3.2 In the present case, opponent 02 did not object to the admissibility of the first and second auxiliary requests which correspond to requests filed about one month before the oral proceedings, and the Board sees no reason to judge the matter differently.

3.3 As regards the main request and the third auxiliary request filed in the oral proceedings, opponent 02 expressed concerns that the freshly claimed feature of channel-forming elements being located along barrel-shaped coaxial surfaces for the first time formed part of an independent claim, leading to implications of the debate which the opponent could not reasonably have foreseen when preparing for the oral proceedings.

The patentee explained that the amendments made to the requests under consideration merely concerned the deletion of dependent claims and changes in the two-part form of claim 1, in the context of which the added feature was not intended to further distinguish the claimed subject-matter from the prior art on file.



The Board, in view of the patentee's submission and taking into consideration that the originally-filed application documents consistently disclose a rigid honeycomb support structure for the purpose of locating the channel-forming elements along barrel-shaped coaxial surfaces, did not share the concerns of opponent 02 and decided to admit the main request and the third auxiliary request into the appeal proceedings.

- 3.4 The fourth auxiliary request is based on the third auxiliary request from which it is distinguished by the deletion of two dependent claims.

This amendment was proposed by the patentee in reaction to the discussion of an aspect of added subject-matter common to the main request and the first to third auxiliary requests.

The Board admitted also the fourth auxiliary request into the appeal proceedings in view of the fact that opponent 02 did not object to its admission.

4. Basis of disclosure of the amendments (Article 123(2) EPC)

- 4.1 Main request

- 4.1.1 Claim 1 is directed to a radiation controlling device comprising a plurality of channels formed by tubular channel-forming elements for which the following features are claimed in combination:

- a) "each of said tubular channel-forming elements comprising a bundle of capillaries"; and

b) "the channel width of each channel is variable along the length of the channel".

4.1.2 According to the patentee, it was clear from the specific examples of Figures 6 and 27 and the corresponding description on pages 28 and 29 of the originally-filed application documents that channel-forming elements could be formed by tubes and that one type of a tube was a bundle of capillaries. Thus, throughout the description the term "tube" could consistently be interpreted as comprehending a bundle of capillaries. Moreover, in the summary of the invention bridging pages 10 and 11 it was disclosed that the channel width in each tube could be made variable. This feature was specifically shown in Figure 10 and described on page 29. Variable channel width and channel forming elements comprising bundles of capillaries not being mutually exclusive and in the absence of any statement in the specification contrary to a combination of these features, the factual situation was comparable to that underlying decision T 40/97 in which the board found that "*... where a number of generally similar embodiments are discussed in equivalent terms, the person skilled in the art will in normal circumstances and when nothing points to the contrary, notionally associate the characteristics of an element of one embodiment, described in some detail, with the comparable element of another embodiment described in lesser detail.*"

4.1.3 Opponent 02 argued that Figures 6 and 10 of the patent in suit concerned different embodiments of the invention and that it was not clear from the

description how features of these two embodiments could be combined.

- 4.1.4 According to established case law, the relevant question when assessing the admissibility of amendments is whether the amendment can be directly and unambiguously deduced from the application documents as filed (cf "Case Law of the Boards of Appeal of the European Patent Office", 5th edition 2006, pages 259ff).

Applying this principle to the present case, it has to be determined whether the originally-filed application documents teach a skilled reader a radiation controlling device formed of a plurality of bundles of capillaries in which each channel, ie each capillary, would have a varying width along its length.

It is not disputed that both features are disclosed in the application documents, however for different embodiments. Normally, features from separate embodiments cannot be combined if such a combination artificially creates a particular embodiment which a skilled person would not contemplate (cf decision T 296/96, point 3.1 of the reasons, as discussed in "Case Law of the Boards of Appeal of the European Patent Office", 5th edition 2006, page 239).

In the present case, the application as filed discusses in fact three variants of channel-forming elements located along the generatrices of imaginary coaxial barrel-shaped surfaces, that is channels which are formed by gaps between reflective layers or envelopes (cf for instance Figures 4 and 5), channels consisting of bent tubes or individual "capillaries" (cf for

instance Figures 1, 10, 16 and 22), or channels designed as narrow capillaries which are grouped into separate bundles, wherein each bundle replaces a tube (Figures 6 and 27).

Channels of variable width are expressly shown and discussed only for the first two of said three variants but not for channels formed by the capillaries of a bundle. Moreover, although the embodiment of Figure 10 depicts an example of a barrel-shaped bundle of tubes in which the width of the tubes varies in proportion to the diameter of the bundle, and notwithstanding the general information that tubes may consist of a plurality of interconnected capillaries, it is not readily conceivable, how these features could be combined, *ie* how a channel structure of varying width could be achieved for each individual capillary in a bundle of capillaries in which the number of channels is enlarged by several orders of magnitude and the channel diameter may be reduced to submicron dimensions (cf page 28, penultimate paragraph of the application as filed). Hence, in the present case, the factual situation is distinguished from that of decision T 40/97 referred to by the patentee, where the skilled person could notionally associate the characteristics of an element of one embodiment with the comparable element of another embodiment described in lesser detail (see point 2.2 of the reasons).

Consequently, given the lack of information from the application documents as to bundles of capillaries with channels of varying width, the Board comes to the conclusion that the claimed combination of features

does not form part of the technical disclosure provided by the application documents.

4.1.5 It follows from the above observations that the combination of features a) and b) claimed in claim 1 of the main request adds technical subject-matter to the patent which extends beyond the content of the application as filed, contrary to the provision of Article 123(2) EPC.

#### 4.2 First to third auxiliary requests

The deficiency under Article 123(2) EPC identified above for the main request applies with equal force to the subject-matter of claim 1 of the first auxiliary request, that of claim 2 of the second auxiliary request, and that of claim 3 of the third auxiliary request.

#### 4.3 Amendments to the fourth auxiliary request

4.3.1 Due to the deletion of dependent claims comprising features which relate to bundles of capillaries having channels of varying width, the fourth auxiliary request avoids the problem set out above for the higher-ranking requests. Nevertheless, for the reasons given below, the request does not comply with the requirement of Article 123(2) EPC either.

4.3.2 According to claim 1, a device for controlling radiation comprising a plurality of channels formed by tubular channel-forming elements encompasses in combination the features that

- i) the tubular channel-forming elements are located along generatrices of imaginary controlled barrel-shaped coaxial surfaces;
- ii) the tubular channel-forming elements are spatially located with a rigid honeycomb support structure;
- iii) each of said tubular channel-forming elements comprises a bundle of capillaries; and
- iv) the rigid honeycomb support structure is formed by a compound filling gaps between the bundles of capillaries.

4.3.3 In the patentee's opinion, a device comprising all of the claimed features was disclosed in particular by the embodiments of Figures 2, 3, 6, 16, 26 and 27, supported by passages of the description on pages 10, 13 and 33. From these pieces of disclosure it was evident that a rigid honeycomb support structure for the tubular channel-forming elements as shown by Figures 2 and 3 was to be used irrespective of the substructure of these elements, ie be it single tubes or bundles of capillaries as shown in Figures 6 and 27. That the honeycomb support structure could be provided by solidifying material filling the gaps between the bundles was expressly disclosed on page 33, second paragraph. Further support for disclosure was given by the chain of originally-filed claims 1, 3, 7 and 9.

4.3.4 In the view of opponent 02, the application documents did not contain a single coherent passage or embodiment relating to a radiation controlling device showing in combination features i) to iv).

4.3.5 Indeed none of the embodiments illustrated by the drawings shows a device formed from a plurality of

bundles of capillaries which would be held on controlled barrel-shaped coaxial surfaces by a rigid honeycomb support structure formed by a compound filling gaps between the bundles.

Page 10, second paragraph of the originally-filed description provides the following pieces of information:

*"In the event that the plurality of channels is designed as capillaries, it is another feature of this invention to group these latter into separate bundles with the longitudinal axes of the bundles positioned along generatrices of imaginary coaxial barrel-shaped surfaces, coaxial to the controlled beam's central axis, and to design the rigid support structure as discs positioned normal to the controlled beam axis and provided with honeycomb patterns of apertures to accommodate each of the capillary bundles. This design configuration is advantageous in that it allows expansion of the spectral band of the device due to a smaller diameter of the channels and a greater number of channels, whereas the labor content of assembling depends on the number of capillary bundles, rather than on the number of channels."*

According to page 13, third paragraph of the application description *"It is productionally effective to create the rigid support structure by filling the gaps between tubes with a compound."*

According to the passage bridging pages 18 and 19 of the description *"FIG. 16 shows a section along the controlled beam axis of an embodiment of the invention,*

*wherein the gaps between channel forming tubes and between tube supporting discs are filled with a solidifying material."*

Finally, the relevant passage on page 33, second paragraph to page 34, first paragraph reads:

*"Devices with tubular channels can be designed with a rigid honeycomb structure of solidifying material 30 (FIG. 16) filling the gaps between tubes 1 and between discs 4. In certain applications, it may be possible to remove discs 4 completely and simply rely on the solidifying material to provide the desired support for tubes 1. Such a design arrangement is suitable for devices with a large number of thin tubes 1, since it is simpler in assembly, for instance with a porous polymer used as the solidifying material to fix parallel positioned tubes and forming the barrel shape by compressing inside a barrel-shaped casing. This design configuration can be considerably lighter due to the absence of supporting superstructure, and this may be important, for instance, when designing X-ray telescopes for use in space.*

*Rigid and precise fixing of channel-forming elements, e.g. tubes 1 in discs 4 with honeycomb pattern positioned apertures 5, provides location of uniformly bent sections of channel-forming elements with a precise aiming of the channel input and output butt-ends at the source 7 and receiver 8 of the radiation, respectively."*

- 4.3.6 Manifestly, none of the cited pieces of information discloses a device showing the claimed features in combination. The cited passage from page 10 addresses



expressly a device which is formed of bundles of capillaries. In this case, however, the rigid honeycomb support structure which is required for arranging the bundles along barrel-shaped coaxial surfaces is provided by discs. There is no mentioning of filling of gaps to be suitable for this purpose.

On the other hand, the reference on page 33 to a rigid honeycomb structure provided by filling material mentions tubes but not bundles of capillaries and, moreover, presupposes the presence of discs. The subsequent hint to applications where it may be possible to remove those discs is in itself ambiguous and does not reveal, how bundles of capillaries could be arranged in a sufficiently accurate manner along coaxial barrel-shaped surfaces by merely using a solidifying filling material.

Consequently, a device showing the combination of features according to claim 1 of the fourth auxiliary request is not disclosed in the description and figures of the application as filed.

Moreover, a claim chain disclosing the claimed subject-matter, as alleged by the patentee, does not exist as is evident from the fact that the claims of the purported chain do not make reference to each other.

4.4 For the above reasons, none of the patentee's main and auxiliary requests on file is allowable.

4.5 In this context, the patentee requested to refer to the Enlarged Board of Appeal the question of whether the combination of features of at least two embodiments

violates Article 83 EPC and/or Article 123(2) EPC if nothing points to the contrary.

No answer to this question is required in order to ensure uniform application of the law, nor does the question concern a point of law. Instead, it relates to matter to be decided on the factual circumstances of the case at hand. It follows that the preconditions set for a referral by Article 112(1) (a) EPC are not met.

Therefore, the request for referral to the Enlarged Board of Appeal cannot be allowed.

5. In summary, the Board finds that none of the requests made by the patentee is allowable.

## **Order**

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

1. The decision under appeal is set aside.  
The patent is revoked.
2. The request for referral of questions to the Enlarged Board of Appeal is rejected.

The Registrar

The Chairman

R. Schumacher

B. Schachenmann