

## **DECISIONS OF THE BOARDS OF APPEAL**

**Decision of Technical Board of Appeal 3.4.1 dated 1 October 1996**

**T 926/93 - 3.4.1\***

(Language of the proceedings)

Composition of the board:

Chairman: G. D. Paterson

Members: H. J. Reich

Y. J. F. van Henden

**Patent proprietor/Respondent: Mitsubishi Denki Kabushiki Kaisha**

**Opponent/Appellant: Siemens AG**

**Headword: Gas laser device/MITSUBISHI**

**Article: 56, 123(2) EPC**

**Keyword: "Main request: inventive step (no)" - "First auxiliary request: not disclosed subject-matter" - "Second auxiliary request: not admitted as belated and not clearly allowable"**

*Headnote*

*An opponent may only substantiate a ground of opposition against a single claim of each request on file. If he succeeds in establishing that a claim of each request is not allowable, the patent will be revoked. Thus an opponent is under no obligation to "overkill" requests put forward by the proprietor by substantiating grounds of opposition against more than one claim of such request.*

**Summary of Facts of Submissions**

I. The Respondent is owner of European patent No. 0 152 084.

II. This patent was opposed by the Opponent on the ground of lack of inventive step mentioned in Article 100(a) EPC, relying with regard to claim 1 as granted on the prior art which can inter alia be derived from the following documents:

D1: US-A-4 375 690;

D3: "Lehrbuch der Klimatechnik", Bd. 1: Grundlagen, 2. Auflage, Verlag C. F. Müller, Karlsruhe, 1974, pages 124 to 127;

D4: Lecture by *K. Gürs* with the title "Research and development in the field of high power laser technology at Battelle" on the conference "Industrial Applications of High Power Lasers" in Linz, Austria, 26 to 27 September 1983; Proc. SPIE Int. Soc. Opt. Eng. (USA), vol. 455, 1984, pages 10 to 16; and

D5: DE-A-2 740 606.

III. The Opposition Division rejected the opposition on the following grounds: A diameter of the gas duct in a gas laser for feeding a laser medium gas which diameter is larger than that of the discharge tube, is disclosed in the schematic drawings of Figures 2a and 8 which are related to embodiments of the invention, because the larger dimensions of the gas duct are significant in this context. Hence, granted claim 1 would be allowable under Article 123(2) EPC. The subject-matter of claim 1 as granted differs from the device disclosed in document D1 by such larger diameter of the gas duct (feature (f)), a diffuser nozzle at the downstream end of the discharge tube (feature (g)), and a circulation speed of the laser medium gas of 100 m/s or more in the discharge tube (feature (h)). The use of said features (f) to (h) is not obvious with regard to the cited prior art, in particular not for improving the stability and power density of the discharge and for increasing the efficiency of the laser excitation. In document D1, there is no indication of a particularly high circulation speed of the laser medium gas. The larger dimension of the gas duct (8) in the schematic drawing of Figure 1 of document D1 has no significance. Though Table 1 on page 13 of document D4 discloses a circulation speed of 270 m/s, there is no indication that such a high speed was needed in an a.c. excited laser and no hint which measures would have to be taken to produce such speed. It was moreover not obvious to employ a diffuser nozzle which clearly influences the discharge; see the patent specification, page 4, lines 27 to 29 and lines 41 to 46, and page 5, lines 53 to 58. Such a diffuser nozzle would nowhere be disclosed in the cited documents.

IV. The Opponent lodged an appeal against the decision of the Opposition Division, inter alia citing the following new documents:

D12: Sov. J. Quantum Electron., vol. 9, No. 3, March 1979, pages 326 to 328; and

D13: Sov. J. Quantum Electron., vol. 10, No. 4, April 1980, pages 443 to 446.

V. In a communication annexed to a summons to oral proceedings the parties were inter alia informed of the Board's preliminary view that - consistent with the text of document D3 - the word "diffusor" is a generic term which comprises as well a shock absorber (such as recognisable by a skilled person in the laser device according to Figure 1 of document D5) and a diffusor with conical cross-section enlargement as specified in granted claim 2 of the patent in suit.

VI. In reply to the communication of the Board and in preparing for oral proceedings, the Proprietor filed on 21 August 1996 a new main and first auxiliary request.

Claim 1 of the **main request** reads as follows:

"1. A gas laser device, comprising

- (a) a discharge tube (110) made of a dielectric material;
- (b) a laser medium gas which is circulated within said discharge tube in the axial direction thereof;
- (c) an optical resonator composed of mirrors (4, 5) disposed in mutual confrontation at both ends of said discharge tube (110);
- (d) a plurality of electrodes (111, 121) oppositely provided on the outer periphery of said discharge tube (110), and
- (e) a power source (150) for applying an a. c. voltage to said oppositely provided electrodes to generate a silent discharge, characterized in that
- (f) a gas duct (g) for feeding the laser medium gas to the discharge tube (110) has a larger diameter than the discharge tube (110);

(g) a conical diffuser nozzle (140) having an expanding angle of about 20° is provided at the downstream end of the gas current in the discharge tube (110) and  
(h) the laser medium gas is circulated at a high speed of 100 m/s or more in the discharge tube (110)."

Claim 1 of the **first auxiliary request** replaces in feature (h) of Claim 1 of the main request the words: at a high speed of 100 m/s "or more" by the words: at a high speed of 100 m/s "up to around 200 m/s".

Claims 2 to 21 of the main and first auxiliary request are dependent on the respective claim 1.

VII. Oral proceedings were duly held on 1 October 1996. At the beginning of the oral proceedings the parties were informed that claim 1 of the first auxiliary request might be held to be not allowable under Article 123(2) EPC, since an upper limit of "200 m/s" is exclusively disclosed in that part of the patent specification which describes the closest prior art. Towards the end of the oral proceedings the Proprietor presented a new second auxiliary request.

Claim 1 of the **second auxiliary request** adds to the subject-matter of claim 1 of the main request the subject-matter of claim 8 of the patent as granted, namely

"i) a metal piece (21, 22) is provided in the vicinity of the discharge section in said discharge tube (110) and a trigger potential is applied to said metal piece."

Claims 2 to 20 of the second auxiliary request are dependent on claim 1.

At the end of the oral proceedings the Opponent requested that the decision under appeal be set aside and that the European patent No. 0 152 084 be revoked. The Proprietor requested that the appeal be dismissed and that the patent be maintained on the basis of the main request as filed on 21 August 1996, the first auxiliary request as filed on 21 August 1996 or the second auxiliary request as filed during the oral proceedings on 1 October 1996.

VIII. In support of its request, the Opponent made essentially the following submissions:

...

(f) It was requested not to admit the Proprietor's second auxiliary request, since it was filed too late and represents a new technical case. Moreover, the subject-matter of claim 1 of the second auxiliary request would not imply an inventive step. Metal pieces, to which a trigger potential is applied, are disclosed in the gas laser according to document D6, see pieces 7 and 8 in Figure 1.

IX. The above submissions were contested by the Proprietor who argued essentially as follows:

...

(f) Feature (i) of claim 1 of the second auxiliary request is disclosed in the original description, page 16, paragraphs 1 to 3, and was claimed in granted claim 8. It would be inconsistent with the legal principles underlying the EPC to prevent in opposition

proceedings a proprietor from restricting the protection in particular to features of dependent claims of its patent specification in the course of oral proceedings, in particular when - as in the present case - the necessity for such limitation only arose from facts and arguments produced for the first time during the oral proceedings. Any procedural considerations must be given a lower significance with regard to a proprietor's essential basic right to be able to defend its invention by a narrowing definition of the protection sought at any time of a pending procedure.

X. At the conclusion of the oral proceedings, the decision was announced that the decision of the Opposition Division dated 10 August 1993 is set aside and the European patent is revoked.

### **Reasons for the Decision**

#### *1. Inventive step - main request*

...

#### *2. Article 123(2) EPC - auxiliary request 1*

The amendment "up to around 200 m/s" in feature (h) of claim 1 of the first auxiliary request is not supported by the disclosure in the description of the patent specification, page 2, line 25. This paragraph indicated the properties of the background art. There is no explicit disclosure of a value of "200 m/s" in relation with the description of the invention of the patent in suit. Since this invention relies on an "increased" flow rate (see page 4, line 32), a skilled reader would see a clear technical contradiction in the fact, that the working speed of a conventional device shall represent the upper speed limit of a device wherein this speed shall be

increased. For the above reasons, claim 1 of the first auxiliary request contains subject-matter which extends beyond the content of the application as filed and therefore does not satisfy the requirements of Article 123(2) EPC. Hence, the first auxiliary request is not allowable.

### *3. Admissibility of auxiliary request 2*

As indicated in paragraph VII above, the subject-matter of this request (which was filed near the end of the oral proceedings) for the first time includes the subject-matter of claim 8 of the patent as granted in the main claim of a request.

According to the established practice of the Boards of Appeal following from decision T 153/85 (OJ EPO 1988, 1), a Board of Appeal may refuse to consider amended claims constituting new requests which are filed at a late stage, for example during oral proceedings, if such amended claims are not at first sight clearly allowable. Thus while, at one extreme, a merely "cosmetic" amendment may be considered clearly allowable at a late stage in opposition appeal proceedings, a substantive amendment which for the first time introduces new subject-matter into the main claim of an auxiliary request which constitutes a new technical case is in principle unlikely to be admissible at such a late stage.

In proceedings before the EPO, both at first and second instance, it is well established that if any claim of a set of claims comprising a request is held not to be allowable, the other claims of such request fall with the unallowable claim, and the entire request is therefore unallowable. The system of auxiliary requests allows a



patent proprietor to prepare for a possible finding that his main request is not allowable, by filing a reasonable number of auxiliary requests as "fall-back" positions.

It follows from the above procedural system that an opponent may only substantiate a ground of opposition against a single claim of each request on file, and if he succeeds in establishing that a claim of each request on file is not allowable, the patent will be revoked. Thus an opponent is under no obligation to "overkill" requests put forward by the proprietor by substantiating grounds of opposition against more than one claim of such requests. For example, an opponent has no obligation to substantiate grounds of opposition against individual dependent claims of a request, just in case the patent proprietor might think in future of filing a further request with the subject-matter of such a dependent claim becoming the subject-matter of a main claim of such further request.

Thus in the present case there was no obligation upon the opponent to substantiate his opposition against the subject-matter of claim 7 of the patent as granted, just in case (as has in fact happened) the proprietor might in future file a further auxiliary request with the subject-matter of this particular sub-claim 7 becoming part of the subject-matter of the main claim of such further auxiliary request.

The inclusion in claim 1 of the second auxiliary request of the subject-matter of claim 7 of the patent as granted has the effect of shifting the centre of gravity of the claimed invention from technical means for improving the flow rate of the laser medium gas to means for applying a pre-ionisation trigger potential to the laser discharge. Such subject-matter constitutes a new technical case, in the sense that this subject-matter has not previously been considered during these opposition proceedings as providing a possible basis for an inventive step.

If the second auxiliary request was to be admitted into these opposition proceedings at this very late stage in the appeal proceedings, it would be necessary to adjourn the proceedings in order to give the opponent a proper opportunity to substantiate his opposition against this new request. Furthermore, in order to ensure that the opponent's case against the new subject-matter which constitutes this new request is considered by two instances (see G 9 and 10/91, OJ EPO 1993, 408, at paragraph 18), it would be necessary to remit the case to the first instance for examination of this new request. Such procedural complication and inevitable considerable delay in finally deciding the opposition is contrary to the public interest in the efficient running of opposition proceedings before the EPO, and unfair to the opponent.

The Board would also refer to decision T 840/93 (OJ EPO 1996, 335) where it is stated that

"A patentee who has lost before the Opposition Division ... has the right to have the rejected requests reconsidered by the Appeal Board. If however the patentee wants other requests to be considered, admission of these requests into the proceedings is a matter of discretion of the Appeal Board, and is not a matter of right. ... For exercising the discretion in favour of ... the patentee ... there must be good reason."

For the above reasons the second auxiliary request is not admitted into the opposition proceedings, and its subject-matter will not be considered in the proceedings.

**Order**

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

1. The decision of the Opposition Division dated 10 August 1993 is set aside.
2. The European Patent is revoked.

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\* This is an abridged version of the decision. A copy of the full text in the language of proceedings may be obtained from the EPO Information Office in Munich on payment of a photocopying fee of DEM 1.30 per page.