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**Datasheet for the decision
of 16 November 2007**

Case Number: T 1273/04 - 3.4.03

Application Number: 98933935.3

Publication Number: 0935321

IPC: H01S 3/18

Language of the proceedings: EN

Title of invention:

Surface emission semiconductor laser

Patentee:

Seiko Epson Corporation

Opponent:

-

Headword:

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Relevant legal provisions:

EPC Art. 54, 123(2)

EPC R. 68(2)

RPBA Art. 10a(2), 10b(1), 10b(3), 11(6)

Keyword:

-

Decisions cited:

T 1360/05, T 1356/05, T 0758/04

Catchword:

In order to be admissible an amended claim belatedly filed in oral proceedings must be clearly allowable by virtue of a clearly permissible amendment. However, this principle has to be tempered in examination appeal proceedings by having regard to the extent to which the application has been examined (reasons 3.2.5).



Case Number: T 1273/04 - 3.4.03

D E C I S I O N
of the Technical Board of Appeal 3.4.03
of 16 November 2007

Appellant: Seiko Epson Corporation
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Shinjuku-ku
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Decision under appeal: Decision of the Examining Division of the
European Patent Office posted 9 June 2004
refusing European application No. 98933935.3
pursuant to Article 97(1) EPC.

Composition of the Board:

Chairman: R. G. O'Connell
Members: E. Wolff
T. Bokor

Summary of Facts and Submissions

I. This is an appeal against the refusal of application 98 933 935 for lack of novelty.

II. The full text of the grounds for refusal posted 9 June 2004, is as follows:

"In the communication(s) dated 29.11.2001, 05.12.2003, 16.01.2004 the applicant was informed that the application does not meet the requirements of the European Patent Convention. The applicant was also informed of the reasons therein.

The applicant filed no comments or amendments in reply to the latest communication but requested a decision according to the state of the file by a letter received in due time on 19.04.2004.

The application must therefore be refused."

III. The latter did not take into account a procedural request included in the said letter faxed on 19 April 2004 withdrawing the main claim request and promoting the auxiliary request to sole claim request.

IV. The actual sole request, treated erroneously as an auxiliary request, was refused on the ground that claim 1 lacked novelty over each of the following documents

D3: JP-A-6224515

or

D4: US 5394423

V. In a reasoned communication annexed to a summons to oral proceedings the board expressed its provisional view that the device of D4 appeared to fall squarely within the wording of claim 1 thereby depriving that claim of novelty.

VI. At oral proceedings before the board on 16 November 2007 the appellant applicant submitted amended claims in the form of a main request and an auxiliary request. He requested that the decision under appeal be set aside and a patent granted in the following version:

Main request:

Claims 1 to 3, description pages 1 to 11, Fig 6, as filed during oral proceedings, and Figs 1 to 5 as published

or

Auxiliary request:

Claims 1 to 6, description pages 1 to 11, Fig 6 as filed during oral proceedings and Figs 1 to 5 as published.

VII. Claim one of the main request reads:

"1. A surface-emitting-type semiconductor laser comprising a resonator (10B, 71, 74) perpendicular to a semiconductor substrate (17), a laser beam from the resonator being emitted perpendicular to the

semiconductor substrate (17), wherein two strain generating sections (41) are disposed on a straight line which passes through the centre of the resonator (10B,71,74) so as to sandwich the resonator (10B,71,74),

characterised in that each of the two strain generating sections (41) comprises a dielectric material (42) or a semiconductor formed in a semiconductor continuously extending from the resonator (10B,71,74) so as to be contiguous to a dielectric material (40A) or a semiconductor formed in the resonator."

VIII. Claim 1 of the auxiliary request reads:

"1. A surface-emitting-type semiconductor laser comprising

a semiconductor substrate (17),

a resonator (10B, 71, 74) formed on a substrate surface of the semiconductor substrate so as to extend in a direction perpendicular to said substrate surface, and to emit a laser beam in said direction, and

two strain generating sections arranged on the substrate surface on two opposite sides of the resonator, each of the strain generating sections (19, 41, 42, 50, 72, 75) having a rectangular shape in plan view with a shorter side thereof facing the resonator;

characterised in that

said two strain generating sections are protrusions (41) that extend in the same direction as and are continuous to the resonator (10B),

the resonator (10B) includes a current-constriction layer (40) having an electrically conductive centre portion (40B) and, contiguous to that, an insulating marginal portion (40A), and

two extensions of the marginal portion (40A) of the current-constriction layer (40) extend in two opposite directions into said protrusions as strain generating portions (42)."

IX. In the statement of grounds of appeal, the appellant observed that the decision of the examining division referred to previous communications, and stated that it was his understanding that the reasons for refusing the sole request established by the letter of 19 April 2004 (previous auxiliary request) were those set out in section "B. Examination of the auxiliary request" in the communication dated 16 January 2004.

X. In relation to the amended claim requests submitted at oral proceedings the appellant applicant argued as follows:

As to admissibility of the claim requests, it had not been possible to conclude necessary consultation with his client until practically the eve of oral proceedings. While regretting the belated timing of the claim requests, the appellant maintained that it should nevertheless be possible for the board to examine these within the framework of oral proceedings. In particular

the amendments were demonstrably compliant with Article 123(2) EPC and overcame the refusal ground of lack of novelty.

Reasons for the Decision

1. The appeal is admissible.
2. *Procedural matters*
 - 2.1 The decision under appeal is a decision by reference, a so-called "decision on the state of the file". This board (in differing compositions) in decisions T 1360/05 and T 1356/05, both of 16 February 2006, has dealt at some length with the appropriateness of decisions in this form, viz decisions by reference to previous communications and their compatibility with the requirements of Rule 68(2) EPC. In each of those appeals the board, without proceeding to examine the substantive merits of the case, remitted it to the department of first instance for further examination. The board reasoned that the examining division had, in each case, failed to take into account amendments and arguments timely submitted by the appellant and, in one of the cases, even of the fact that oral proceedings had taken place.
 - 2.2 In a further decision, T 758/04, the present board was prepared to consider the requirement of Rule 68(2) EPC for a reasoned decision to have been complied with because the two communications referred to in the decision under appeal (EPO Form 2061) formed a coherent and convergent argument on inventive step which was not

affected by an intervening clarifying amendment of the claims. The timely submitted arguments ignored by the examining division were based on the same claims and could - at a stretch - have been regarded as an amplification of those already on file. Moreover, the board acknowledged that it did not have to do any mosaicing i.e., choose which parts of each of the communications were relevant and which should be disregarded. The board noted in passing that it would be helpful if a refusal decision - even a decision by reference - indicated clearly the application documents on which the refusal was based.

- 2.3 In the present case, too, the examining division has failed to take fully into account a response by the applicant. In that response, timely submitted on 19 April 2004, and even referred to in the refusal decision, the applicant had withdrawn the then pending main request and made the extant auxiliary request the sole request.
- 2.4 As the objections raised against the sole request can be established without undue burden and as the appellant had identified those objections correctly without any apparent difficulty, the board accepts that these special circumstances merit the conclusion that the requirement of Rule 68(2) EPC for a reasoned decision has been complied with.
- 2.5 For the sake of completeness it should be mentioned that the board arrived at this conclusion despite the latest communication of the examining division incorrectly referring to the description and drawings of the refused auxiliary request as having been filed

on 30 April 2002 when both were, in fact, as originally filed.

3. *Admissibility of the main request*

3.1 *The amendment*

Claim 1 of the main request differs from claim 1 of the request refused by the examining division in the wording of the last paragraph. The words "... comprises a dielectric material or a semiconductor formed in a semiconductor ..." now replace the earlier wording "... comprises a dielectric material or a semiconductor formed so as to be bonded to a semiconductor ...". In short, according to claim 1 as refused the strain generating sections should be formed **on** the semiconducting material, while according to claim 1 of the main request as amended at oral proceedings the strain generating sections are formed **in** the material. Contrary to arguments submitted by the appellant, in the application as originally filed these two requirements were presented as clear alternatives: claim 4, dependent on claims 1 to 3, claimed strain generating sections **bonded to** the semiconductor; claim 5, dependent on claims 1 to 3 (and claim 7 dependent only on claim 5), claimed strain generating sections **formed in** the semiconductor. Thus the amendment represents a shift from one of these alternatives to the other.

3.2 *Criteria for admissibility of belated amendments in oral proceedings*

3.2.1 Article 10a(2) RPBA, first sentence, provides that the statement of grounds of appeal shall contain a party's complete case. Article 10b(1) RPBA specifies some of the criteria that a board shall apply in exercising its discretion to admit and consider amendments to this case, viz complexity of the subject-matter submitted, the current state of the proceedings and the need for procedural economy, while Article 10b(3) RPBA adds that amendments sought to be made after oral proceedings have been arranged shall not be admitted if they raise issues which the board ... cannot reasonably be expected to deal with without adjournment (postponement) of the oral proceedings.

3.2.2 Article 11 RPBA is headed "Oral proceedings" and Article 11(6) RPBA obliges the boards to decide cases at the end of the oral proceedings, as far as practicable. This implies that amendments which bring up major new issues are not, without special reasons, to be admitted, because a board would be forced to decide on these issues within a severe time constraint and in all likelihood without proper preparation.

3.2.3 There is otherwise no specific provision in the RPBA as to the criteria a board should apply in exercising its discretionary power to admit amended claim requests submitted for the first time during oral proceedings without any legally relevant excuse for the lateness. In the spirit of the above provisions and in accord with the principle that the threshold for admissibility should be the higher the later the stage of the

proceedings, the boards of appeal have however developed a practice whereby claims which are *clearly not allowable* will not normally be admitted. This is a relatively low threshold and reasonably straightforward to apply.

3.2.4 More difficult is the higher threshold; the case of claims which - while passing the hurdle of "*clearly not allowable*" - are nevertheless *not clearly allowable* and which should also - in accordance with frequently applied jurisprudence - not normally be admitted. In a case like the present of refusal for lack of novelty it would not be appropriate to require that an amended claim should be *clearly allowable* in the sense of clearly involving an inventive step given that the assessment of inventive step has not begun. It is however reasonable to expect

- (i) that the *amendments should be clearly permissible* under provisions of the EPC explicitly or implicitly governing amendment of the application (Article 123(2), Article 84 EPC, Rule 86(4) EPC, Rule 88 EPC),
- (ii) that the newly defined subject-matter should represent a convergent development of the subject-matter which has been the subject of the examination and appeal procedure to date and
- (iii) that the subject-matter of the thus amended claims should be clearly new.

3.2.5 Thus, the general principle is that in order to be admissible, an amended claim belatedly filed in oral proceedings must be clearly allowable by virtue of a clearly permissible amendment. However, this principle has to be tempered in examination appeal proceedings by having regard to the extent to which the application has been examined.

3.3 *Application of the criteria*

3.3.1 Claim 1 of the main request is judged by the board to have been amended in a manner which is clearly permissible. However, as explained at 3.1 above, the amendment has shifted the subject-matter claimed in a divergent manner which would require a new study of the prior art and potentially even review of the search in order to assess novelty. The main request is therefore not admitted.

3.3.2 Even if the board were to accept the appellant's argument that the two apparently alternative features in fact express the same idea, and thus were the subject of the proceedings from the outset, this would reflect on the permissibility of the amendment as an Article 84 EPC problem or an Article 123(2) problem, as it would immediately raise a doubt as to how the features are to be construed. These permissibility issues do not arise if the features concerned are considered to be alternatives, since this latter interpretation is, in the board's judgement, fully supported by the description, drawings and the originally filed claim structure.

4. *Admissibility of the auxiliary request*

4.1 For the reasons given immediately below, the board judges the auxiliary claim request to be based on a clearly permissible amendment defining clearly new subject-matter. Hence the board exercises its discretion to admit this request.

4.2 *Article 123(2) EPC*

4.2.1 Claim 1 of the auxiliary request differs from claim 1 of the request refused by the examining division in that the generic wording of the last paragraph is replaced by specific reference to the features of Figures 4 and 5 which are that

(a) the strain generating sections are protrusions (41) that extend in the same direction as and are continuous to the resonator (10B),

(b) the resonator (10B) includes a current-constriction layer (40) having an electrically conductive the centre portion (40B) and, contiguous to that, and insulating marginal portion (40A), and

(c) two extensions of the marginal portion (40A) of the current-constriction layer (40) extend in two opposite directions into said protrusions as strain generating portions (42).

4.2.2 These three features are clearly described, even if not in precisely the same words, with reference to Figures 4 and 5 of the drawings. The board is satisfied

that these features do not add subject matter which extends beyond the content of the application as filed and that the amendment is therefore in compliance with Article 123(2) EPC.

5. *Novelty*

5.1 The features mentioned in paragraph 4.2.1 overcome the lack of novelty over document D3 or document D4 on which the refusal of the application was based.

6. *Inventive step*

6.1 Since no examination for inventive step has as yet taken place in relation to this application, the board does not consider it appropriate to attempt this from scratch in oral proceedings.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the department of first instance for further prosecution.

Registrar

Chair

S. Sánchez Chiquero

R. G. O'Connell