

Internal distribution code:

- (A) [] Publication in OJ
(B) [] To Chairmen and Members
(C) [] To Chairmen
(D) [X] No distribution

D E C I S I O N
of 6 February 2002

Case Number: T 0148/00 - 3.4.2
Application Number: 97106749.1
Publication Number: 0804059
IPC: H05K 3/36, H05K 1/14, H01R 23/70

Language of the proceedings: EN

Title of invention:
Structure for mounting an electrical module on a board

Applicant:
NEC CORPORATION

Opponent:

-

Headword:

-

Relevant legal provisions:
EPC Art. 111(1)

Keyword:
"Main request: clarity (yes)"
"Subject-matter extending beyond the content of the
application as filed (no)"
"Remittal to the first instance (yes)"

Decisions cited:
T 0063/86

Catchword:

-



**Europäisches
Patentamt**

**European
Patent Office**

**Office européen
des brevets**

Beschwerdekammern

Boards of Appeal

Chambres de recours

Case Number: T 0148/00 - 3.4.2

D E C I S I O N
of the Technical Board of Appeal 3.4.2
of 6 February 2002

Appellant: NEC CORPROATION
7-1, Shiba 5-chome
Minato-ku
Tokyo (JP)

Representative: VOSSIUS & PARTNER
Siebertstrasse 4
D-81675 München (DE)

Decision under appeal: Decision of the Examining Division of the
European Patent Office posted 7 July 1999
refusing European patent application
No. 97 106 749.1 pursuant to Article 97(1) EPC.

Composition of the Board:

Chairman: E. Turrini
Members: A. G. M. Maaswinkel
V. Di Cerbo

Summary of Facts and Submissions

- I. European patent application No. 97 106 749.1 (publication No. 0 804 059) was refused by the decision of the examining division, dispatched on 7 July 1999.

The reason for the refusal was that the subject-matter of claim 1 according to applicant's main request then on file contravened Article 123(2) EPC; that claim 1 according to the first auxiliary request was not allowable under Article 123(2) EPC and Article 84 EPC; and that claim 1 according to the second auxiliary request was not allowable under Article 84 EPC.

As to the issue of substantive matters (Article 52 EPC), in the decision under appeal only reference was made to the first official communication of the examining division, in which an objection under Articles 52(1) and 56 EPC against claim 1 as originally filed had been raised in view of document:

D1: DE-A-38 01 610.

- II. The applicant lodged an appeal against this decision. The notice of appeal was received on 15 September 1999, the prescribed fee being paid on the same day. The statement setting out the grounds of appeal was received on 16 November 1999.
- III. With the statement of grounds of appeal, the appellant submitted sets of claims 1 to 6 according to a main, a first auxiliary and a second auxiliary request.
- IV. In a communication in annex to summons to attend oral proceedings the board expressed its doubts with respect

to the formal requirements of the claims according to these requests (Articles 84 and 123(2) EPC).

Furthermore the board pointed out provisionally, that for a discussion of substantive matters in addition to document D1 also the following documents cited in the European Search Report could be regarded as the closest prior art:

D2: FR-A-2 608 328

D3: EP-A-0 287 274

- V. Oral proceedings were held on 6 February 2002 during which the appellant submitted a new main request and a new auxiliary request, both including claims 1 to 6. He requested that the case be remitted to the first instance for further prosecution on the basis of the claims according to the main or the auxiliary request. During the oral proceedings in addressing the expression "liquid crystal polymer" in claim 5 the appellant made reference to following citation:

Römpp Chemie Lexikon, 9. Edition, page 1395, Keyword "Flüssigkristalline Polymere".

- VI. The independent claim 1 of the main request reads as follows:

"A module mounting structure comprising:

- a) a daughter board (3) carrying electronic parts (4) on both sides thereof, said daughter board (3) being provided with a plurality of input/output pads (7) on at least one side thereof;
- b) an affixing member (6) for affixing a plurality of substantially straight lead frames (5), each of

said lead frames (5) having one end thereof soldered to a corresponding one of said plurality of input/output pads (7); and

- c) a mother board (1) formed with a plurality of through holes (2) respectively corresponding to said plurality of input/output pads (7), wherein the other end of each of said lead frames (5) is inserted in and soldered to a corresponding one of said plurality of through holes (2)."

VII. In support of the main request, the appellant argued substantially as follows:

In order to overcome the objection under Article 123(2) EPC in the decision under appeal against the expression "*straight* lead frames" in claim 1, the new claim 1 now defined that the lead frames were "*substantially straight*". Support for this feature was found in the original description on page 9, lines 9 to 14 and in Figures 3 to 5 and 7. In particular Figure 4 showed the straight configuration of the lead frames 5 in their mounted state connecting the daughter board 3 with the mother board 1. Furthermore the claim now clearly defined that the lead frames were soldered to the input/output pads of the daughter board and to the holes in the mother board, which should overcome the further objections raised against the claim on which the decision was based. Therefore the formal objections against the claims should be no longer valid.

With respect to the issue of patentability of the claims according to the main request, the opinion of the examining division against the patentability of claim 1 as originally filed had been based on document D1, and the division had not taken position against the

amended claim. Furthermore, the further documents from the European Search Report mentioned by the board had never been discussed during the first instance procedure. Therefore remittal of the case for further prosecution in the first instance would be justified in order not to deprive the applicant of his right to an examination in two instances also with respect of substantive matters.

VIII. At the end of the oral proceedings, the board gave its decision.

Reasons for the Decision

1. The appeal is admissible.
2. *Article 123(2) EPC*

With respect to claim 1 as originally filed claim 1 of the main request has been amended to include the feature that the lead frames are *substantially straight*. Fair disclosure for this feature may be found in the Figures, in particular Figures 5A to 5D, which show the shape of the lead frames in detail, including their dimensions (Figures 5A and 5B). These values are also disclosed on page 8, lines 10 to 15. Other minor amendments in claims 1 and 2 equally find their support in the application as originally filed.

Therefore the claims of the main request meet the requirements of Article 123(2) EPC.

3. *Article 84 EPC*

In the board's opinion, the claims of the main request are not objectionable under Article 84 EPC. The expression "liquid crystal polymer" in claim 5 has a well established meaning, as shown by the appellant by the reference to the chemical encyclopaedia "Römpp".

4. *Substantive matters (Article 52 EPC)*

As argued by the appellant, apart from an objection with respect to Articles 52(1) and 56 EPC in the first official communication against the original claim 1 in view of the teaching in D1, the examining division has not taken a position in this respect to the amended claims. The decision under appeal was entirely based on the grounds of Articles 123(2) and 84 EPC. Furthermore, claim 1 of the main request now defines the further feature "*substantially straight*" for the lead frames, which feature had not been defined in any previous claim. From the examining procedure so far no conclusions are obtainable concerning the position of the examining division with respect to the substantive requirements. The patentability of the new claim may have to be assessed in the light of the further documents cited in the European Search Report, or the examining division may even consider it necessary to consult further prior art documents because of the new feature. As stated in decision T 63/86 (OJ EPO 1988, 224), point 2 of the reasons, such further examination should be carried out by the examining division as the first instance. The board therefore exercises its power under Article 111(1) EPC to remit the case to the examining division for further examination of the application on the basis of claims 1 to 6 of the main request filed during the oral proceedings of 6 February 2002.

5. Since remittal of the case to the first instance corresponds to the appellant's main request, there is no necessity to address his auxiliary request.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the first instance for further prosecution on the basis of claims 1 to 6 of the main request.

The Registrar:

The Chairman:

P. Martorana

E. Turrini