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D E C I S I O N
of 11 January 2000

Case Number: T 0965/96 - 3.2.6

Application Number: 91200961.0

Publication Number: 0454254

IPC: B23Q 1/14

Language of the proceedings: EN

Title of invention:
Positioning device having static fluid bearings

Applicant:
Philips Electronics N.V.

Opponent:
-

Headword:
-

Relevant legal provisions:
EPC Art. 123(2), 111(1)

Keyword:
"Amendments - deletion of an inessential feature - (allowed)"
"Decision re appeals - remittal (yes)"

Decisions cited:
T 0331/87

Catchword:
-



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Boards of Appeal

Chambres de recours

Case Number: T 0965/96 - 3.2.6

D E C I S I O N
of the Technical Board of Appeal 3.2.6
of 11 January 2000

Appellant: Philips Electronics N.V.
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Representative: Cuppens, Hubertus Martinus Maria
Internationaal Octrooibureau B.V.
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Decision under appeal: Decision of the Examining Division of the
European Patent Office posted 11 May 1995
refusing European patent application
No. 91 200 961.0 pursuant to Article 97(1) EPC.

Composition of the Board:

Chairman: P. Alting van Geusau
Members: M. Bidet
J. C. De Preter

Summary of Facts and Submissions

- I. European patent application No. 91 200 961.0 (publication No. 0 454 254) was refused by a decision of the Examining Division on the ground that the application was amended in such a way that it contained subject-matter which extended beyond the content of the application as filed, and thereby contravened the requirement of Article 123(2) EPC.

During the proceedings before the Examining Division the originally filed Claim 1 had been amended and no longer comprised the feature "a tip of the tool fastened to the ϕ -carriage lying close to the axis of rotation running through the workpiece during operation". The Examining Division was of the opinion that supporting and guiding the longitudinal and transverse carriages of the claimed positioning device on a single surface in order to improve accuracy of the tool necessarily required that the tip of the tool had to be located on the axis of rotation of the ϕ -carriage and that such removal of this feature led to the formulation of an independent Claim 1 whose subject-matter extended beyond that of the application as originally filed. Furthermore, the removed feature was clearly and consistently indicated in the application as originally filed, as being an essential part of the positioning device.

- II. An appeal against that decision was filed on 12 July 1995 and the appeal fee was paid on the same day. The statement of grounds of appeal was filed on 17 August 1995.

In his statement of grounds, the appellant submitted that in fact two drawbacks of the prior art were addressed in the application as filed namely: firstly, the necessity to correct the position of the tool tip when the ϕ -carriage was rotated about its axis of rotation and secondly, the loss of rigidity of the supporting structure and thus the positioning accuracy of the supported tool. These drawbacks, however, related to different, mutually independent problems. Consequently, claiming the solution to the second drawback did not necessarily require the inclusion of features relating to the solution of the first drawback. Furthermore, the skilled person would directly and unambiguously recognise that the removed feature met the conditions for deletion of an inessential feature set out in decision T 331/87.

III. In response to a telephone call of the Board on 11 November 1999 in order to clarify the undefined axis of rotation in Claim 1 then on file, the appellant filed on 25 November 1999 replacement pages of the description together with an amended set of claims, Claim 1 reading as follows:

"1. A positioning device for machining a workpiece (97) fastened on a rotatable support (95), which device is provided with a longitudinal carriage (7) movable in an x-direction, a transverse carriage (65) which is movably guided along the longitudinal carriage in a y-direction perpendicular to the x-direction, and a ϕ -carriage (85) which is rotatably guided along a circular cylindrical guide (79) of the transverse carriage about an axis of rotation (83) of the ϕ -carriage, which is perpendicular to the x-direction and y-direction and coincides with a centerline (83) of said circular cylindrical guide, characterised in that the longitudinal carriage (7) and the transverse carriage (65) are supported in a direction parallel to

the axis of rotation (83) of the ϕ -carriage via respective static fluid bearings (17, 19, 77) by a single common base surface (3) extending parallel to the x-direction and the y-direction, and that the longitudinal carriage and the transverse carriage are guided along said single common base surface by means of said respective static fluid bearings."

IV. The appellant requested as a main request that the decision under appeal be set aside and a patent be granted on the basis of the following documents:

Claims: 1 to 5 filed on 25 November 1999

Description: pages 1 to 4 also filed on 25 November 1999,
page 9 filed on 17 August 1993
pages 5 to 8 and 10 as originally filed

Drawings: sheets 1/5 to 5/5 as originally filed.

By way of auxiliary request, the appellant requested that the decision under appeal be set aside and a patent be granted on the basis of Claim 1 filed on 17 August 1995.

Reasons for the Decision

1. The appeal is admissible.
2. *Amendments*
 - 2.1 Present Claim 1 according to the main request is amended in that it combines the features of original Claims 1 and 3 with necessary rewording. This claim specifies that both the longitudinal carriage and the transverse carriage are supported and guided by a single common base surface (see Figures 1 and 3 and corresponding text of the description, and particularly pages 4, lines 28 to 36, page 7, lines 1 to 17), but no longer contains the feature according to which the tip of the tool fastened to the ϕ -carriage lies close to the axis of rotation running through the workpiece during operation, as mentioned in original Claim 1.
 - 2.2 Dependent Claim 2 specifies that the ϕ -carriage is supported and guided also by the single common base surface as described in page 7 lines 11 to 17 of the original application.
 - 2.3 Dependent Claims 3 to 5 correspond to original Claims 2, 5 and 6.
3. The issue to be considered in the present appeal is whether the amendment of Claim 1, in particular the omission of the last feature of the initially filed Claim 1 is acceptable under the provisions of Article 123(2) EPC.

3.1 As regards the general principle on determining whether removal of a feature in a claim is allowable, the Board follows the conclusions arrived at in decision T 331/87 (OJ EPO, 1991, 22). In accordance with this decision omission of a feature does not infringe the provisions of Article 123(2) EPC if the skilled person, reading the specification as filed would directly and unambiguously recognise that

- (1) the feature is not explained as essential in the original disclosure,
- (2) it is not, as such, indispensable for the function of the invention in the light of the technical problem it serves to solve, and
- (3) the replacement or removal does not require real modifications of the other features to compensate for the change.

3.2 The original patent application relates to positioning devices such as those known from US-A-2 051 127 in which a ϕ -carriage is attached to a transverse carriage and is rotatable relative to the transverse carriage about an axis of rotation which is perpendicular to the x-direction and the y-direction, whereby the longitudinal carriage is movable in the x-direction perpendicular to the y-direction and the transverse carriage is movable relative to the longitudinal carriage in the y-direction (see page 1, lines 13 to 22 of the originally filed description).

Starting from the structure of the positioning device known from US-A-2 051 127, two drawbacks are addressed in the originally filed description.

Firstly, the x-position and y-position of a tool tip, once set, will change if the ϕ -carriage is rotated about the axis of rotation. If a desired positioning of the tool tip has to be maintained, corrections have to be calculated to displace the longitudinal carriage and the transverse carriage. Such displacements necessarily generate a loss of accuracy of the tool tip positioning (see page 1, lines 22 to 29).

Secondly, a further drawback of the known lathe follows from the fact that the different carriages are stacked. This adversely affects the rigidity of the whole structure, which leads to a deviation of the tool position in the direction of the movement of the longitudinal carriage or the transverse carriage.

3.3 Each of the drawbacks leads to a loss of accuracy and it is apparent to the skilled person that the whole amount of inaccuracy results from the sum of the inaccuracies generated by each drawback.

Therefore, the features solving the problem of inaccuracy due to the first drawback, namely: the tool tip lying close to the axis of rotation of the ϕ -carriage running through the workpiece during operation, constitutes a first means of correction and an improvement of accuracy over the structure known from document US-A-2 051 127.

This correction may or may not be followed by the features solving the problem of loss of accuracy due to the second drawback, namely: the longitudinal carriage, the transverse carriage and the ϕ -carriage each being guided themselves along a common base surface. That this second correction can be made without the first one, is confirmed by the description page 2, lines 16 to page 3, line 33 from which it is clear that accurate positioning of the tool tip close to the axis of

rotation represents one part of a solution and the carriages guided on a common base surface represent a further part of a solution. This solution does not require the presence of the tool tip on the axis of rotation, so that it is clear that this characterising feature of the originally filed Claim 1 is not necessary for the function of the invention in the light of the specific technical problem it serves to solve. Furthermore, it does not require any modification of other features of Claim 1 to compensate for the change. Moreover, nowhere in the application is it stated that the particular position of the tip tool is compulsory or essential to improve accuracy of the known positioning device.

Of course, the best accuracy of the positioning device is obtained by applying both improvements of the different solutions at the same time, (see the text, page 2, lines 37 to page 3, lines 4; page 3, lines 12 to 16, and lines 29 to 33). However, there is no bar to applying each improvement individually.

- 3.4 Therefore, all three requirements set up in decision T 331/87 being fulfilled, removal of the feature in question does not violate the requirements of Article 123(2) EPC. The claims in accordance with the appellant's main request form a suitable basis for further examination.
4. The Examining Division issued a decision upon introduction of new matter in the application as filed and, consequently, it did not have any reason to address the issue of inventive step. Nevertheless, it mentioned in the decision that "the subject-matter of the independent Claim 1 meets the requirements of Article 52(1) EPC with respect to the prior art revealed during the prosecution of the application", but without giving any reasoning on this issue in its

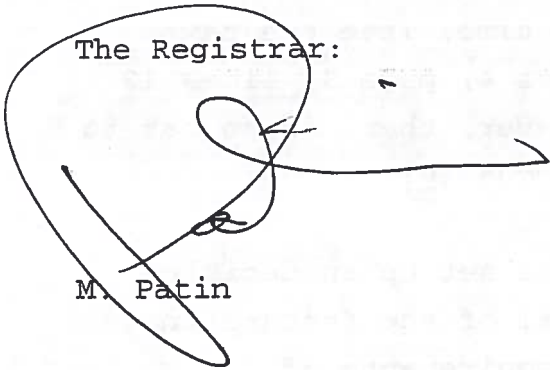
decision. In such a case, the Board considers it appropriate to make use of its power under Article 111(1) EPC and to remit the case to the Examining Division for further examination of the substantive issues of the EPC.

Order

For these reasons it is decided that:

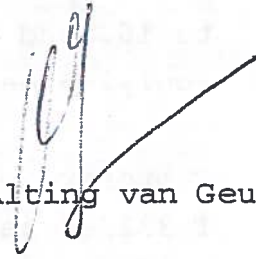
1. The decision under appeal is set aside.
2. The case is remitted to the Examining Division for further prosecution.

The Registrar:



M. Patin

The Chairman:



P. Altling van Geusau

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