Case Number: T 0740/96 - 3.2.6

Application Number: 89200775.8

Publication Number: 0338606

IPC: B23B 13/02

Language of the proceedings: EN

Title of invention:
Metal bar feed control device with distributor and several hydraulic motors for feeding a multispindle automatic lathe

Patentee:
PIETRO CUCCHI S.p.A.

Opponent:
I.E.M.C.A Industria Elettromeccanica Complessi Automatici S.p.A.

Headword:
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Relevant legal provisions:
EPC Art. 56, 64, 69(1), 83, 84, 100(a), (b)

Keyword:
"Inventive step (yes)"
"Interpretation of the extent of protection of a patent: not a task of the EPO"
"Enlarged Board of Appeal; referral (no)"

Decisions cited:
T 0442/91, T 0002/80, T 0454/89, T 0760/90, T 0016/87, T 0023/86

Catchword:
Case Number: T 0740/96 - 3.2.6

DECISION
of the Technical Board of Appeal 3.2.6
of 26 October 2000

Appellant: I.E.M.C.A. Industria Elettromeccanica
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Decision under appeal: Decision of the Opposition Division of the European Patent Office posted 19 June 1996 rejecting the opposition filed against European patent No. 0 338 606 pursuant to Article 102(2) EPC.

Composition of the Board:
Chairman: P. Alting van Geusau
Members: M. Bidet
J.-C. De Preter
Summary of Facts and Submissions

I. The respondent is proprietor of European patent No. 0 338 606.

Claim 1 as granted reads as follows:

"Control device for feeding metal bars to a multispindle automatic lathe comprising a rotating drum (12) bearing a plurality of bar pushers (15) arranged peripherally and equally spaced from each other, there being associated with said bar pushers control means, said control means consisting of a hydraulic motor (13) for each bar pusher (15), said motor being fixed to said rotating drum, fluid under pressure being fed selectively to at least one of said hydraulic motors (13) through a hydraulic control unit consisting of a distributor designed to place in communication a fluid delivered under pressure with at least one motor to which it is constrained, characterised in that said distributor comprises a fixed central nucleus (16) born by a head (17) to which lead ducts (23,24) for delivery and discharge respectively of the fluid under pressure, said ducts being connected, through respective passages (25,26) made in the head (17), to ducts (27,28) respectively made through the fixed central nucleus (16) and designed to be placed in sequence in communication with related ducts (29,30) respectively for feeding fluid under pressure to the motors (13) and discharge thereof therefrom, said related ducts (29,30) being made through a rotating sleeve (31) outside the fixed nucleus (16) and integral with the drum (12), there being made in the fixed nucleus (16) at least one cavity (33) designed to communicate with each other one
of the ducts (27) of the nucleus and one of the related ducts (29) during the rotation of the drum (12) necessary to bring a bar to the following processing station."

II. The patent was opposed by the appellant (opponent) on the grounds of lack of novelty, lack of inventive step and lack of industrial applicability, as well as on the ground of insufficiency of disclosure of the invention (Article 100(a) and (b) EPC, respectively).

The following state of the art was essentially relied upon:


III. The Opposition Division rejected the opposition by decision announced on 22 May 1996 and posted on 19 June 1996 and was of the opinion that the patent disclosed the invention in a manner sufficiently clear and complete for it to be carried out by a skilled person as required by Articles 100(b) and 83 EPC and that it could be used industrially, so that the requirements of Article 57 EPC were met.

The subject-matter of claim 1 of the patent as granted differed from the disclosure of D1 in that the distributor comprised a fixed central nucleus borne by a head to deliver and discharge fluid under pressure, the fixed nucleus including at least one cavity designed to communicate with each other one of the ducts of the nucleus and one of the related ducts (29) during rotation of the drum necessary to bring a bar to the following processing station. In so far the subject-matter of claim 1 was novel (Article 100(a)
Inventive step of the subject-matter of claim 1 was acknowledged since there was neither a disclosure nor incitation to be found in the documents of the state of the art concerning a distributor in which the successive connection of the hydraulic ducts for actuation of pushing a bar was achieved simply by rotation of the drum bearing the plurality of bar pushers.

IV. On 8 August 1996 the appellants (opponents) lodged an appeal against this decision, the appeal fee being paid the same day.

In its statement of the grounds of appeal which was filed on 23 October 1996, the appellant maintained the view that the claimed subject-matter lacked novelty and inventive step, was not industrially applicable and was not sufficiently clear and complete to be carried out by the skilled person. The appellant submitted eight questions (Q1 to Q8) to be referred to the Enlarged Board of Appeal.

V. In a communication dated 3 April 2000, issued together with the summons to attend oral proceedings, the Board expressed the provisional opinion that the skilled person would not appear to have undue difficulties to grasp the constructional concept of the claimed control device. Therefore, the grounds for opposition of Article 100(b) EPC did not appear to be involved.

As regards the issues of novelty and inventive step the Board was of the opinion that D1 did not disclose ducts in a fixed nucleus having a cavity establishing a fluid...
communication with a related duct of a sleeve fixed to the rotating drum and that such structure did not appear to be disclosed or hinted at in any of the other available documents of the state of the art.

As regards the appellant's request for referral of eight questions to the Enlarged Board of Appeal, the Board expressed doubts whether any of these questions clearly related to a particular legal issue relevant for the present appeal case. Therefore, these questions did not appear suitable for referral.

VI. Oral proceedings took place on 26 October 2000.

The appellant requested that the decision under appeal be set aside and that the European patent be revoked. He also requested that the question indicated as Q2 in the statement of grounds of appeal be referred to the Enlarged Board of Appeal.

Question Q2 reads as follows:

"If in an Opposition proceedings, for the purpose of the confirmation of the novelty and/or inventive step of a claim, the extent of a claim is restrictively interpreted by the Opposition division on the basis of the description and drawings, which restrictive interpretation is equivalent to a silent restrictive amendment of the claim, whereas evidence is submitted that the patent proprietor does not restrictively interpret such claims and/or explicitly confirms his broad claim interpretation, should in such case the Opposition division request the patent proprietor to explicitly amend the wording of the concerned claim to the satisfaction of the Opposition division or Board of
Appeal for the purpose of compliance with the novelty requirements or, failing to do so, face revocation of the patent".

The respondent requested dismissal of the appeal.

VII. The arguments submitted by the appellant in support of these requests can be summarised as follows:

Although the conditions of Article 84 were met by claim 1, an essential feature for performing the invention, namely the extension of the cavity in the peripheral direction of the nucleus should be further specified to exclude an annular cavity. Otherwise claim 1 included the possibility that all motors would be actuated and no particular motor would be selected. Considering this interpretation the invention claimed was not sufficiently clear and complete within the meaning of Articles 100(b) and 83 EPC.

All features of claim 1 were anticipated by the control device disclosed in D1, except for the feature relating to the rotating sleeve being mounted on a fixed central nucleus. This feature was however not essential for the invention, so that it should be ignored. Consequently, the subject-matter of claim 1 was not novel as required by Article 100(a) and Article 54 EPC.

If, however, the claimed distributor were found to be novel it still lacked inventive step. The control device of D1 disclosed a structure already solving the two problems identified in the patent in suit, namely: to be able to select a hydraulic motor for a bar pusher and to reduce the time needed for rotation of the drum and for pushing the bar, (so-called dead time).
Therefore, D1 comprised sufficient further information leading to the subject-matter of claim 1, so that consequently an inventive step could not be acknowledged (Article 100(a) with Article 56 EPC).

Concerning the request to refer question Q2 to the Enlarged Board of Appeal, it was argued that there were a remarkable number of contradictory decisions of the Boards of Appeal on the interpretation of claims. This fact supported the need for referral of Question Q2.

VIII. The respondent contested the appellant's arguments and argued as follows:

On the proper reading and interpretation of claim 1, none of the appellant's objections concerning the requirements of Article 100(b) and 57 EPC could stand. Furthermore, novelty of the subject-matter of claim 1 was evident since D1 disclosed a rotating central nucleus and a fixed sleeve without fluid distribution capacity whereas claim 1 required a fixed nucleus and rotation sleeve acting as a distributor. Not only was the control device for feeding metal bars according to D1 completely different from that of the patent in suit, it also did not disclose a cavity between the nucleus and the sleeve. Therefore D1 lacked any suggestion to the functioning of the claimed device for distribution of hydraulic fluid to the hydraulic motors in sequence depending on the relative position of fixed central nucleus and rotating sleeve.

**Reasons for the Decision**

1. The appeal is admissible
2. Interpretation of the subject-matter of claim 1

2.1 According to claim 1 the control means for pushing the metal bars in a multispindle automatic lathe comprises a hydraulic motor for each bar pusher. The motors are fixed to the rotating drum bearing the plurality of bars to be machined. A distributor for delivering a fluid under pressure to at least one selected motor comprises a fixed central nucleus and a rotating sleeve in order to establish a fluid communication between the feeding duct in the nucleus and a selected duct mounted on the sleeve.

A cavity made in the fixed nucleus is designed to provide and maintain fluid communication during the angle of rotation of the drum necessary to bring a bar to the following processing station. Thus this cavity has the function of keeping the fluid communication to the selected motor open also during rotation of the drum from one lathe spindle position to the next. It follows that the cavity is necessarily located at the periphery of the central nucleus, between the facing two ducts and in such a manner that during the rotation from one spindle position to the next only these two ducts are in free communication.

2.2 According to Figures 6 to 8 of the patent in suit an hydraulic circuit of the same structure is provided both for feeding fluid to and discharging fluid from the motor (see the ducts 30, 28, 26 and 24). However, it is immediately apparent to the skilled person that only one communication from the two available functions - namely feeding the fluid or discharging it - needs to be controlled for selective activation of the hydraulic motors (see the preamble of claim 1), the other may be
a duct communicating with all motors. Such more general embodiment was already included in the subject-matter of the originally filed claim 2.

2.3 In view of these assessments it is immediately apparent to the skilled person that the claimed control device comprises a distributor in which a fixed central nucleus and a rotating sleeve provide the sequential connection of fluid ducts for activating, one after the other, the bar pushers.

3. Article 100(b) EPC (Article 83 EPC and Article 57 EPC)

3.1 In respect of the requirements of Article 100(b) EPC the appellant mainly argued that claim 1 did not include a feature essential for carrying out the invention, namely: the cavity should have a limited peripheral extension. Therefore, the invention as claimed was incomplete and could not be carried out or, at least, was not industrially applicable.

3.2 However, as explained in point 2 above, the straightforward interpretation of the subject-matter of claim 1 requires that the cavity has a limited peripheral extension otherwise the claimed control device cannot function as a distributor in which in sequence communications of related ducts are selected as specified in claim 1.

Since the appellant's interpretation of claim 1 does not take account of the functional relationship of the specified features, the appellant's conclusions in respect of incomplete disclosure and of lack of industrial applicability based on a false interpretation of claim 1 cannot be considered valid.
3.3 It is to be noted that in its letter dated 21 September 2000, page 3 the appellant stated that "the only reason why the opposition has been started" was "to obtain from the Boards of Appeal a judgment on the validity or invalidity of the whole range claimed by the granted claim 1 in which claim the cavity had an endless annular form". As was also expressed during the oral proceedings, the appellant's intention was to obtain from the Board an opinion with respect to the extent of the protection of claim 1, in particular vis-à-vis the constructional deviation shown in sketch 1 and sketch B filed by the appellant during the opposition proceedings.

However, the extent of the protection of a patent is examined by the EPO in the opposition proceedings only within the framework of Article 123(3) EPC (see for example T 442/91 of 23 June 1994). In principle interpretation of the extent of the protection of a patent is not the task of the EPO, but is, according to Articles 64 and 69 EPC, that of the national Courts competent in procedures on infringement cases. Of course the Board has to determine precisely the technical content of the claims since their content needs to be examined with respect to the grounds of opposition and, when amended claims are concerned, also with respect to the other requirements of the EPC, and in so far the Board has to explain, when necessary, how terms specified in the claims should be understood.

In the present case the opposed patent has not been amended in the opposition proceedings so that Article 123(3) EPC does not apply. Moreover the Board explained in section 2 above, how the wording or terms of claim 1 should be understood, before arriving at the
conclusion that this claim meets the requirements of sufficiency of disclosure of the invention (Article 83 and 100(b) EPC), and no necessity arises for any further examination with respect to interpretation of the extent of the protection.

4. **Novelty**

4.1 The parties and the Board are in agreement that D1 discloses the most relevant prior art. When compared to the subject-matter of claim 1 of the patent in suit, D1 does not disclose ducts provided in a fixed nucleus having a cavity establishing a fluid communication with a related duct of a sleeve fixed to a rotating drum bearing the bars.

4.2 The appellant argued that this distinguishing feature was not relevant for the invention and should therefore be ignored when assessing novelty of the subject-matter of claim 1.

The board cannot find any support for this opinion in either the EPC or case law of the Boards of appeal. On the contrary, the EPC and the case law of the Boards of appeal make clear that for assessing novelty of the subject-matter of a claim such assessment should be carried out on the basis of the full content of the claim.

In the present case, it was accepted by the appellant that the claim was clearly drafted and in view of the fact that the feature concerned indeed is important for the functioning of the claimed device (see point 5.5 of this decision) the appellant's allegations in respect of lack of novelty based on the ignorance of this
feature of claim 1 does not hold.

4.3 Since the other available documents are clearly less relevant than D1 novelty of the subject-matter of claim 1 can be concluded.

5. **Inventive step**

5.1 The structure of the control device disclosed in D1 requires for each motor its own control valve provided in a rotating nucleus supporting the hydraulic motors for pushing the bars to be machined. Supply to and extraction of fluid from the rotating nucleus is achieved by a fixed part having ports for the supply and extraction being in open communication with two concentric rings (see Figure 9) of the rotating nucleus. These elements do not result in a distributor but only provide communication between the supply and extraction port and the valves for actuating the pushers.

5.2 In comparison thereto, the claimed control device of the patent in suit comprises a distributor which does not need such control valves since opening of the fluid communication, maintaining it and closing it, is the direct result of the provision of the fixed central nucleus and the rotating sleeve borne by the nucleus, the feed and discharge ducts and the cavity with their functional relationship as defined in claim 1.

5.3 When compared to the structure of D1 the problem to be solved by the patent in suit can be seen in overcoming the disadvantages of the known control device, in particular to make the distributor simpler and more reliable.
This object is achieved by the subject-matter of claim 1, essentially in that the liquid communication is established by ducts and a cavity provided in a single unit made of a fixed nucleus and an intermittently rotating sleeve. Such distribution represents a concept different from that of D1 and which is new and further is not derivable from that of D1 which needs control devices for commutation of the valves.

5.4 With this distributor arrangement actuation of the successive bar pushers is controlled without needing additional valves, simply by the rotation of the sleeve and bar pushers around the fixed nucleus thereby placing in sequence in communication the related ducts of the hydraulic pusher motors. By way of such a structure comprising a unit provided by one central fixed nucleus fitted with ducts and a peripheral cavity and one sleeve also fitted with ducts, control of pushing the bar is achieved in direct dependency on the position of rotation of the sleeve during rotation of the drum.

5.5 The appellant argued that the feature of the "distributor comprising the central nucleus borne by a head to which lead ducts for delivery and discharge, respectively, of the fluid under pressure" was an inessential feature. It follows from the above assessments that the contrary is the case because it is this arrangement of the distributor in combination with the remaining features of the control device which defines the simplified structure resulting in a new concept.

5.6 Since also none of the available documents show a
distributor of the claimed type, the state of the art fails to provide the skilled person with an indication towards the structure of the distributor of the control device as specified in the characterising part of claim 1.

Consequently the subject-matter of claim 1 involves an inventive step within the meaning of Article 56 EPC.

6. **Referral of a question to the Enlarged Board of Appeal**

6.1 The appellants requested referral of the question indicated as Q2 in the statement of grounds of appeal, to the Enlarged Board of Appeal.

6.2 The Enlarged Board of Appeal shall be responsible for deciding points of law referred to it by Boards of Appeal (see Article 22(1)(a) EPC). According to Article 17 of the Rules of procedure of the Boards of Appeal if a point is to be referred to the Enlarged Board of Appeal, a decision to this effect shall be taken by the Board concerned. Therefore, it is the Board that decides whether a question should be referred to the Enlarged Board of Appeal if it is related to a particular legal issue relevant for the present appeal case.

6.3 The question Q2 of the appellant is in direct relation with the request dealt with in section 3.3 above, relating to the extent of the protection conferred by what the appellant considered to be too broad a claim. The Board came to the conclusion (see last paragraph of section 3.3) that its task in the present appeal is only to examine whether the grounds of opposition invalidate the patent. More particularly once the Board
explained how the terms of the claims should be understood for the assessment of novelty and inventive step there is neither an obligation nor a necessity to give any further interpretation on the extent of the protection of the granted patent.

6.4 These conclusions do not give rise to the points mentioned by the appellant in its question Q2. Claim 1 is not restrictively interpreted but merely taken as it is by determining its technical features and their functional interaction (see point 2 above), this only with a view of identifying its subject-matter. Nothing else was done by the Opposition division in the decision under appeal.

The Board also cannot find that there are "a remarkable number of contradictory decisions" as was alleged by the appellant (see point 2.1.4 of the statement of grounds of appeal) in this respect. The decisions referred to by the appellant (T 23/86, OJ 1987, 316; T 16/87, OJ 1992, 212; T 2/80, OJ 1981, 431; T 454/89 and T 760/90) do not in any way put the Board's conclusions in the present case in doubt (see also point 4, "Interpretation of claims" on pages 172 and 173 of "Case law of the boards of appeal", 3rd edition).

Therefore, since the issue addressed in the question Q2 does not arise in the present case, referral of the question to the Enlarged Board of Appeal is refused.

Order

For these reasons it is decided that:
The appeal is dismissed.

The Registrar:                  The Chairman:

M. Patin                        P. Alting van Geusau