BESCHWERDEKAMMERN DES EUROPÄISCHEN PATENTAMTS

BOARDS OF APPEAL OF THE EUROPEAN PATENT OFFICE

CHAMBRES DE RECOURS DE L'OFFICE EUROPEEN DES BREVETS

Publication in the Official Journal Yes / No

File Number: T 311/90 - 3.2.4

Application No.: 85 307 145.4

Publication No.: 0 180 349

Title of invention: Feed mechanism for woodworking machinery

Classification: B23Q 3/00, B27B 25/02

D E C I S I O N
of 12 April 1991

Applicant: Wadkin Public Limited Company

Headword:

EPC Article 56

Keyword: "Inventive step - yes"

Headnote

Europäisches Patentamt | European Patent Office | Office européen des brevets

Beschwerdekammern | Boards of Appeal | Chambres de recours

Case Number : T 311/90 - 3.2.4

D E C I S I O N
of the Technical Board of Appeal 3.2.4
of 12 April 1991

Appellant : Wadkin Public Limited Company
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Representative : Serjeants
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Decision under appeal : Decision of Examining Division 2.3.02.096 of the European Patent Office dispatched on 24 November 1989 refusing European patent application No. 85 307 145.4 pursuant to Article 97(1) EPC.

Composition of the Board :

Chairman : C. Andries
Members : H. Seidenschwarz
M. Schar

Summary of Facts and Submissions

I. European patent application No. 85 307 145.4 filed on 7 October 1985 was refused by a decision of the Examining Division 2.3.02.096 dispatched on 24 November 1989.

II. The reason for the refusal was that the subject-matter of Claim 1 filed with letter of 15 May 1989 did not involve an inventive step in the light of the teaching known from document FR-A-1 072 127 in combination with the teaching known from the document CH-A-351 391.

III. The Appellant lodged an appeal against the decision on 16 January 1990, paid the appropriate fee on 22 January 1990 and submitted the Statement of Grounds on 14 March 1990.

IV. In response to communications of the Board of Appeal the Appellant filed with letter of 18 March 1991 new Claims 1 and 2 and new pages 1 and 2, and with letter of 4 September 1990 new pages 3 and 4.

New Claim 1 reads as follows:

"A rip saw comprising a roller (10) for driving a workpiece on a saw table along a fence (12) towards a blade (14), power means (16) for rotating the roller (10), an arm (26) in relation to which the roller (10) is rotatable, an upright shaft (22) supported by the saw table on the side of the blade (14) remote from the fence (12) and on which upright shaft (22) the arm (26) is fast, and a spring (30) coiled around the upright shaft (22), fastened at one end to an adjustable stop (32), at the other end to a collar (34) locked to the upright shaft (22), and

biassing the upright shaft (22) to urge the roller (10) towards the fence (12)".

V. The Appellant requests implicitly that
- the decision under appeal be set aside, and
- a European patent should be granted on the basis of the following documents:
  Claims 1 and 2 and pages 1 and 2 of the description, filed with letter of 18 March 1991;
  Pages 3 and 4 of the description, filed with letter of 4 September 1990;
  Drawings: Figures 1 and 2 filed with letter of 15 May 1989;
  Figure 3 as published.

Reason for the Decision

1. The appeal is admissible.

2. New Claim 1 is supported by the combination of the originally filed Claims 1 and 2 and by the description as originally filed (page 1, lines 5 to 10; page 3, line 22) in combination with the figures as originally filed.

Claim 2 is identical with Claim 3 as originally filed.

The new drawing shows Figure 1 as originally filed and Figure 2 supplied with the positions A and B which positions are mentioned on page 3, line 34 of the description as originally filed.

The amendments in the description relate to an adaptation of the description of the present claims, and to the assessment of the prior art according to the documents FR-A-1 072 127 and CH-A-351 391.

The application, therefore, complies with Article 123(2) EPC.

3. The subject-matter of the application relates to rip saws. According to the Appellant, rip saws are employed for heavy cutting operations and, therefore, must be robust in their construction. Commonly known rip saws are customarily provided with powered feed rollers to drive timber workpiece along a fence towards a band saw blade. The positions of the feed rollers and fence relative to the blade are each adjustable by means of a handwheel and screw. The feed rollers are biassed towards the fence by means of a spring or weights or hydraulically. This allows a certain amount of variation, perhaps 25 mm in the width of the workpiece fed. A workpiece, however, may be put through the rip saw a number of times, and reduced in width at each pass. This results in a high frequency at which it is necessary to adjust the position of the feed mechanism.

4. The technical problem to be solved is, therefore, to construct a feed mechanism for a rip saw, which allows a greater variation in the width of the workpiece than the known feed mechanism without the need to reposition this feed mechanism.

5. According to the application it is proposed to solve this problem by providing a rip saw with a feed mechanism having the features indicated in Claim 1.

6. After examination of the other documents cited in the European search report, the Board of Appeal has come to the conclusion that the rip saw as defined in Claim 1 is not disclosed in anyone of them. Since this has never been disputed, there is no need for further detailed substantiation of this matter.

The subject-matter as set forth in Claim 1 is, therefore, novel within the meaning of Article 54 EPC.

7. On the question of whether or not the prior art, according to the available documents would suggest a rip saw as defined in Claim 1, the following should be observed:

7.1 Document FR-A-1 072 127 describes a feed mechanism connected to an arm (5) extending from an upright shaft (4) which is mounted on a table (1) of a saw and located on the side of a fence (3) remote from the blade (2) of said saw. The arm is pivotable about said upright shaft parallel to the table. The feed mechanism comprises a roller (17) rotated by an electric motor (12). This roller (17) is movable with respect to said arm and biassed towards the fence or towards the table by a spring (18). Thus this saw can be used either as a saw for cutting edged pieces, planks and slabs (dédoubleur: cf. Figure 1) or as a trimmer saw (déligneur: cf. Figure 2): cf. page 1, left column, lines 1 to 6; left column, line 34 to right column, line 20.

From the above it follows that document FR-A-1 072 127 discloses a completely different feed mechanism and, furthermore, that it does not disclose a saw which is suitable to handle timber workpieces "which comprises all features implied under the term rip saw".

Indeed the subject-matter of Claim 1 differs from the saw known from this document in the following features:

- the saw is a rip saw;
- the upright shaft is secured to the saw table on the side of the blade remote from the fence;
- the arm is fast on said upright shaft, and

- the spring is coiled around said upright shaft, fastened at one end to an adjustable stop, at the other end to a collar locked to said upright shaft and biasses the upright shaft to urge said roller towards the fence.

It is commonly known that a rip saw is distinct from a "dédoubleur" which is a band saw for cutting edged pieces, planks and slabs. The rip saw is designated for one specific function, namely for cutting timber fast with the grain and has much wider blades than band saws, because the size of the blade requires the workpiece to be fed slowly to prevent the blade from wandering from the intended line of cut. It corresponds therefore in French to a "scie à refendre".

In view of the above, the Board is of the opinion that the attention of a person skilled in the art is not guided to a type of saw which does not show the same kind of robustness as rip saws.

Document FR-A-1 072 127, therefore, does not lead a person skilled in the art to a rip saw as specified in Claim 1.

7.2 Document CH-A- 351 391 concerns a mechanism for driving sawn timber on surface planing machine.

This driving mechanism comprises rollers (7) which are urged by torsion springs (8) towards a table (H) such as to press down the rollers on the sawn timber. The torsion spring is coiled around shafts (3), on which levers (5,6) of the rollers are fast, and fastened at one end to stops (4) and at the other end to collars locked to the shafts. The shafts (3) are orthogonal to the vertical longitudinal plane of the machine whereas the rollers are inclined to said plane. From this it is clear that the rollers are not

urged towards a fence (V) and, that they even drive the workpiece (5) away from the fence (cf. Figures 1 and 2).

The teaching, which can be derived from the above-mentioned document is to use a torsion spring which has just the right characteristic for avoiding an increase of the spring resistance when the rollers are moved upwards by the sawn timbers (cf. page 1, left column, lines 1 to 20).

The application of the above teaching in a commonly known rip saw (cf. above section 3) does not lead to a rip saw according to Claim 1.

7.3 The adaptation of the teaching of document CH-A-351 391 to the saw known from the French document would only result in replacing the tension spring (18) in the French document by a torsion spring which necessarily has to be coiled around the spindle (11) of the motor (12). However, the other constructional details concerning the upright shaft and arm connected to the upright shaft are not influenced by said teaching.

Therefore, even the combination of both teachings of both the CH and the FR documents does not lead the person skilled in the art to a rip saw as specified in Claim 1.

7.4 The other documents cited in the search report likewise give no hint of the subject-matter of Claim 1. Their teachings could not, therefore, either alone or in combination with the teachings of the documents discussed in the foregoing paragraphs, lead the person skilled in the art to a rip saw as specified in Claim 1.

7.5 Hence, in the Board's judgement the subject-matter of Claim 1 involves an inventive step within the meaning of Article 56 EPC.

8. Consequently Claim 1 and Claim 2, which is directed to a particular embodiment of the subject-matter of said Claim 1, are allowable.

9. Rule 29(1) EPC stipulates that claims should normally be formulated in two parts. However, as provided by Rule 29(1), second sentence, this two-part formulation need be used only in appropriate cases. In the present case, the Board considers that the two-part formulation would only give a misleading picture of the prior art. For this reason, a two-part claim is not appropriate.

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 with the order to grant a European patent on the basis of the documents as defined in above point V.

The Registrar: The Chairman:

N. Maslin C. Andries

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