DECISION
of 12 August 2002

Case Number: T 1069/01 - 3.2.1
Application Number: 97939019.2
Publication Number: 0925127
IPC: B21D 5/06

Language of the proceedings: EN

Title of invention: Strip Shaping Mechanism

Applicant: Acorn Engineering (Guildford) Limited

Headword: -

Relevant legal provisions: EPC Art. 54, 56, 84, 96(2)

Keyword: "Clarity (yes)"
"Novelty, inventive step (yes)"

Decisions cited: T 0032/82

Catchword: -
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DECISION
of the Technical Board of Appeal 3.2.1
of 12 August 2002

Appellant: Acorn Engineering (Guildford) Limited
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Decision under appeal: Decision of the Examining Division of the European Patent Office posted 14 May 2001 refusing European patent application No. 97 939 019.2 pursuant to Article 97(1) EPC.

Composition of the Board:
Chairman: F. Gumbel
Members: M. Ceyte
H. Preglau
Summary of Facts and Submissions

I. European patent application No. 97 939 019.2 (PCT/GB 97/02364) was refused by a decision of the Examining Division posted 14 May 2001.

II. The reason given for the decision was that independent claims 1 and 6 did not comply with Article 84 in conjunction with Rule 29(1) and (3) EPC, because they did not comprise all the essential features necessary to define the invention.

More specifically the Examining Division argued that three rolls are essential to define the invention clearly; that the apparatus must comprise a means for advancing the strip transversely to its length in order for the claim to be clear and that the flexible supporting member comprises a web-like member.

III. On 5 July 2001 the appellant (applicant) lodged an appeal against this decision and paid the prescribed appeal fee in due time.

The statement of grounds of appeal was filed on 1 September 2001.

IV. In reply to a communication of the Board the appellant filed on 21 May 2002 amended claims 1 to 5 and a new page 3 of the description which replaces previous page 3.

It requested that the decision under appeal be set aside and a patent be granted on the basis of the following documents:
Claims: 1 to 5 as filed 21 May 2002 (with letter dated 16 May 2002),

Description: page 3 filed 21 May 2002, and pages 1, 2, 4 to 8 as originally filed,

Drawings: Figures 1 to 3 as originally filed.

V. Amended claims 1 and 5 read as follows:

"1. Apparatus for concave shaping metal strip adapted to pass the strip transversely to its length through a shaping set of rolls (8, 9, 11) at which the concave shape is applied to the metal strip, characterised in that it comprises a flexible belt or web-like member (4) adapted to support the strip in its passage through the shaping set of rolls (8, 9, 11), whereby to ensure that the strip is subject to the shaping process along the total passage thereof through the shaping set of rolls (8, 9, 11)."

"5. A method for concave shaping metal strip including passing the strip transversely to its length through a shaping set of rolls (8, 9, 11) at which the concave shape is applied to the strip, characterised in that the strip is supported in its passage through the shaping set of rolls (8, 9, 11) by means of a flexible belt or web-like member (4), whereby to ensure that the strip is subject to the shaping process along the total passage thereof through the shaping set of rolls (8, 9, 11)."
Reasons for the Decision

1. The appeal is admissible.

2. Procedural matters

In the sole communication dated 23 September 1999, the Examining Division informed the applicant, that the deficiencies mentioned in the international preliminary examination report gave rise to identical objections under the corresponding provisions of the EPC. The appellant was therefore invited to file amendments in order to remedy these deficiencies.

In its letter dated 30 December 1999 the applicant presented detailed arguments why in its view the objections raised by the Examining Division as to independent claims 1 and 6 were not well founded. It filed an amended set of claims, where independent claims 1 and 6 remained unchanged.

According to Article 96(2) EPC, the Examining Division shall invite the applicant "as often as necessary" to file observations. The expression "as often as necessary" indicates that the Examining Division has a discretion which has to be exercised objectively in the light of the circumstances of each case.

In the Board's view, that discretion was exercised properly, since claims 1 and 6 had not been amended and the arguments put forward by the applicant still failed to convince the Examining Division. Consequently there is no procedural violation in this respect.
3. According to the jurisprudence of the Boards of Appeal the clarity requirement of Article 84 EPC has to be interpreted as meaning not only that a claim must be comprehensible from a technical point of view but also that it must define clearly the subject-matter of the invention that is to say specify all the essential features thereof. As essential features have to be regarded all features which are necessary to obtain the desired effect or differently expressed which are necessary to solve the technical problem with which the application is concerned (see T 32/82, OJ EPO 1984, 354, point 15).

In the present case, the nearest prior art is that stated on page 2 of the description which relates to an apparatus for concave shaping a metal strip adapted to pass the metal strip transversely to its length through a shaping set of rolls at which the concave shape is applied to the metal strip.

According to the patent application, an apparatus of this kind suffers from the problem that the lateral end areas of the bent strip tend to end up planar because the rolls are unable to subject the lateral ends to a curve-creating force, (see page 2, second full paragraph of the description).

Therefore the technical problem to be solved by the present invention is to overcome or at least substantially reduce the above-mentioned drawback.

In an apparatus of the type stated in the prior art portion of claim 1, this problem is solved according to the invention by a flexible belt or web-like member adapted to support the strip in its passage through the
shaping set of rolls.

In accordance with the process aspect of the present invention, this problem is solved in a method as defined in the prior art portion of claim 5 by supporting the strip in its passage through the shaping set of rolls by means of a flexible belt or web-like member.

Independent claims 1 and 5 as at present drafted both specify that the strip is passed transversely to its length through the shaping set of rolls. The claimed apparatus need not comprise means for advancing the strip into the shaping set of rolls in order to solve the above problem. It is also observed that the claimed flexible belt or web-like member is "adapted to support the strip in its passage through the shaping set of rolls". This necessarily implies that the flexible belt or web-like member which supports the strip is part of the means for advancing the strip into the shaping set of rolls.

The feature that the shaping set of rolls comprises "at least three rolls" is also not essential to solve the above problem or to define the invention clearly. As rightly stated by the appellant (applicant) it is immediately apparent to a skilled person that these rolls could e.g. be replaced by two lower rolls and an overhead non-rolling beam which is adapted to move into the gap defined by the two underlying rolls. To add such feature as required by the Examining Division would therefore unduly restrict the claim.

The Board is thus satisfied that taking into consideration the amendments made to the independent
4. The Examining Division has only raised an objection of lack of clarity and accepted that the claimed subject-matter is novel and inventive over the cited prior art documents.

It is evident from the statements in point 3 above that the apparatus according to claim 1 and the method according to claim 5 differ from the nearest prior art acknowledged in the patent application by the features stated in the characterising portion of these claims.

The subject-matter of the claims is also novel having regard to the prior art documents cited in the search report, due to the fact that they i.a. all fail to disclose the step of passing the strip transversely to its length through a shaping set of rolls.

Furthermore, there is nothing in the cited prior art which could have led the skilled person to arrange a flexible belt or web-like member for supporting the strip in its passage transversely to its length through the shaping set of rolls, in order to ensure concave shaping across the whole width of the strip.

Therefore the subject-matter of independent claims 1 and 5 involves an inventive step (Article 56 EPC).
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 patent on the basis of the documents indicated in point IV above.

The Registrar: 

G. Magouliotis

The Chairman:

F. Gumbel