Case Number: T 1308/05 - 3.2.06
Application Number: 01660232.8
Publication Number: 1332807
IPC: B21C 37/29
Language of the proceedings: EN
Title of invention: Method and apparatus for making a branch collar in a pipe
Patentee: EFES TEX AG
Opponent: Witzig & Franck GmbH
Headword: -
Relevant legal provisions: EPC Art. 52(1), 54(1), 56, 123(2),(3)
Keyword: "Admissibility of amendments - yes"
"Novelty and inventive step - yes"
Decisions cited: -
Catchword: -
Case Number: T 1308/05 - 3.2.06

DECISION
of the Technical Board of Appeal 3.2.06
of 10 October 2007

Appellant: EFES TEX AG
(Patent Proprietor) Via Dufour 2, Casella postale 3198
CH-6901 Lugano (CH)

Representative: LEITZINGER OY
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Respondent: Witzig & Franck GmbH
(Opponent) Am Holderstock 2
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Representative: Abel, Thomas Mario
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Decision under appeal: Decision of the Opposition Division of the
European Patent Office posted 12 August 2005
revoking European Patent No. 1332807 pursuant
to Article 102(1) EPC.

Composition of the Board:
Chairman: P. Alting Van Geusau
Members: G. Kadner
R. Menapace
Summary of Facts and Submissions

I. The mention of grant of European patent No. 1 332 807 in respect of European patent application No. 01660232.8 filed on 4 February 2002 was published on 28 January 2004.

II. Notice of opposition was filed against this patent with a request for revocation based on the grounds of Article 100 (a) EPC.

By decision posted on 12 August 2005, the Opposition Division revoked the European patent since the subject-matter of independent claim 1 was not novel and the subject-matter of independent claim 3 lacked an inventive step. During the opposition proceedings the following documents were filed by the Opponent:

E1: König + Klöcke 1995, VDI, pages 73 and 74
E2: Oehler/Kaiser 2001/1973, pages 276 to 283
Offer of 14.07.2000, cover page, pages 1 and 7 and drawing STATION 3, W 99 0213 - D20
"Eidesstattliche Versicherung" by Mr. Frank Baumbusch of 19.01.2004
Zeitplan of 13.11.2003, pages 1, 2
Photo of participants of meeting on 26./27.04.2001
Meeting folder pages 1, 2, 43 to 45 and page 6 of photo series TURMAT 26
by the Patentee:
Annex 2: Affidavit of Mr. Christer Långstedt of 09.12.2003

III. Notice of appeal was filed against this decision by the Appellant (Patentee) on 7 October 2006 together with payment of the appeal fee. With the grounds of appeal, received at the EPO on 9 December 2005, the Appellant filed an auxiliary request.

IV. In a communication dated 7 May 2007 accompanying the summons to oral proceedings, the Board expressed the view that the Opposition Division's conclusion in respect of novelty and inventive step, also in respect of the alleged public prior use, appeared to be correct. It was also stated that the subject-matter claimed in the auxiliary request appeared to be novel, and that inventive step would have to be discussed during oral proceedings.

V. With letter dated 19 June 2007, the Appellant withdrew its request for oral proceedings and submitted that the Respondent (Opponent) would agree to the maintenance of the patent on the basis of the auxiliary request.

VI. Following a communication of the Board dated 25 June 2007, the parties specified their requests.

With letter dated 2 July 2007, the Appellant withdrew its main request (maintenance of the patent as granted) and requested maintenance of the patent according to the
auxiliary request. Retyped claims 1 to 3 together with an adapted page 2 of the patent specification were filed.

With letter dated 25 July 2007, the Respondent withdrew its requests for revocation of the patent and for oral proceedings. Agreement was submitted to the maintenance of the patent according to the Appellant's auxiliary request filed together with the grounds of appeal.

Independent claims 1 and 2 read as follows:

"1. A method for bending the rims of a pipe hole for a hole-enclosing collar or neck by using a forming die (3), which is movable radially relative to the pipe and which is displaced from inside the pipe outwards for shaping the collar, the rectification of a collar produced by the forming die (3) in terms of its roundness and/or diametrical sizes being effected by means of a calibration mandrel (11) movable from outside the pipe inwards, which is pressed by means of an external drive unit into the collar produced by the forming die (3), the calibration mandrel (11) stretching the collar to comply with its own size, wherein upon its penetration into the neck, the calibration mandrel (11) pushes the forming die back to its initial position for a new collaring operation, characterized in that the forming die (3) is used to produce a collar diameter larger than a desired final size in the lengthwise direction and a collar diameter smaller than a desired final size in the crosswise direction of a pipe, and that the dimensioning of the collar diameters is rectified by a crosswise measurement of the calibration mandrel (11), wherein the calibration mandrel (11) has a diameter which is larger in a
transverse direction ($D_2$) than in a lengthwise direction ($D_1$).

2. A collaring apparatus for bending the rims of a hole for a hole-enclosing collar or neck, said apparatus comprising a body element (1) insertable inside a pipe to be collared and a forming die (3) adapted for substantially radial movement relative to the pipe and having an outer diameter which is substantially equal to the desired inner diameter for the collar, a hole or recess (9) present in the body element (1), which is dimensioned to receive the forming die (3), said forming die (3) being operable under the guidance of said hole or recess (9), as well as elements (2, 4, 5, 14) engageable with a drive unit for displacing the forming die (3) from inside the pipe outwards, the hole or recess (9) having its center line aligned with a calibration mandrel (11) movable co directionally therewith, which is pressable by means of an external drive unit from outside the pipe inwards into a collar produced by the forming die (3), the calibration mandrel (11) in use stretching the collar to comply with its own size and, upon its penetration into the collar, the calibration mandrel (11) pushing the forming die (3) back to its initial position for a new collaring operation,

characterized in that the forming die (3) is dimensioned to produce a collar diameter ($D_1$) larger than a desired final size in the lengthwise direction and a collar diameter ($D_2$) smaller than a desired final size in the crosswise direction of a pipe, the calibration mandrel having a diameter which is larger in a transverse direction ($D_2$) than in a lengthwise direction ($D_1$) of
the pipe whereby this crosswise diameter disparity rectifies the final size as desired."

Reasons for the Decision

1. The appeal is admissible.

2. Amendments

New claim 1 was amended by incorporating the subject-matter of dependent claim 2. New claim 2 is a combination of the subject-matter of granted claim 3 with that of granted dependent claims 5 and 7. The description was adapted to the new numbering of the claims. These amendments are allowable under Article 123(2) and (3) EPC.

3. Novelty

The public prior use proven by E3 is no longer contested. E3 discloses a method and an apparatus according to the precharacterizing portions of claims 1 and 2. E3 does not disclose the features of characterizing portions of these claims according to which the forming die (3) is dimensioned to produce a collar diameter \( D_1 \) larger than a desired final size in the lengthwise direction and a collar diameter \( D_2 \) smaller than a desired final size in the crosswise direction of a pipe, the calibration mandrel having a diameter which is larger in a transverse direction \( D_2 \) than in a lengthwise direction \( D_1 \). Since the further prior art documents also do not show these features, the subject matter of
claim 1 and 2 meets the requirement of novelty (Article 54(1) EPC).

4. **Inventive step**

4.1 The closest prior art is represented by E3. Starting from this known method and apparatus the problem underlying the invention is the provision of a method and an apparatus which can be used for correcting the roundness and diametrical dimensions of a neck or collar formed by a collaring device according to E3. This technical problem is solved by the subject-matter of claims 1 and 2, in particular by calibrating the initially formed hole with a conical, oval calibration mandrel.

4.2 Since the forming dies and the calibration mandrels used in E3 and the other prior art documents have a circular cross-section, they cannot provide an indication of the claimed solution according to which they have an elliptical cross section.

4.3 Although the skilled person generally would recognize the problem of a spring-back action after a forming operation, the specific problem of a different spring-back action of the collar in the lengthwise and cross directions where pipe holes are concerned has no antecedent in the prior art. Also no hint or motivation leading to the claimed solution of the problem is derivable from the prior art. Therefore the skilled person in the technical field concerned is not led to the subject-matter claimed in an obvious manner. Hence the method of claim 1 and the apparatus of claim 2 involve an inventive step (Article 56 EPC).
5. The Board is satisfied that, by the amendments made to the description during the appeal proceedings, it has been properly adapted to the final claims.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the department of first instance with the order to maintain the patent on the basis of the following documents:

   Claims 1 to 3 as filed on 19 June 2007, description columns 1 and 2 as filed on 2 July 2007 and column 3 as granted together with figures 1 to 5 as granted.

The Registrar: The Chairman:

M. Patin P. Alting van Geusau
Case Number: T 1308/05 – 3.2.06

DEcision
of 28 November 2007
correcting errors in the decision
of the Technical Board of Appeal 3.2.06
of 10 October 2007

Appellant: EFES TEX AG
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CH-6901 Lugano (CH)

Representative: LEITZINGER OY
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to Article 102(1) EPC.

Composition of the Board:
Chairman: P. Alting Van Geusau
Members: G. Kadner
R. Menapace
Summary of Facts and Submissions

I. The present decision concerns the correction under Rule 89 EPC of the decision dated 10 October 2007 in case T 1308/05 concerning European Patent No. 1 332 807.

II. The appellant (patentee) had filed columns 1 and 2 of the description on 5 October 2007.

III. By decision taken on 10 October 2007 the Board ordered that:

The case is remitted to the department of first instance with the order to maintain the patent on the basis of the following documents:

Claims 1 to 3 as filed on 19 June 2007, description columns 1 and 2 as filed on 2 July 2007 and column 3 as granted together with figures 1 to 5 as granted.

IV. With letter dated 16 November 2007 and received on 21 November 2007 at the EPO, the Appellant pointed out that the reference 2 July 2007 concerning columns 1 and 2 was incorrect and requested to change that date to 5 October 2007.

Reasons for the Decision

The correction is allowable under Rule 89 EPC because in the Board's decision the filing date of columns 1 and 2 was erroneously indicated as 2 July 2007.
In fact, the Board's intention, when taking its decision, was to maintain the patent with columns 1 and 2 of the description filed on 5 October 2007.

Order

**For these reasons it is decided that:**

The order of the decision of 10 October 2007 is corrected as follows:

In point 2 the wording:
"columns 1 and 2 as filed on 2 July 2007"

is replaced by the wording:
"columns 1 and 2 as filed on 5 October 2007"

The Registrar:  
M. Patin

The Chairman:  
P. Alting van Geusau