DECISION
of 19 November 2004

Case Number: T 0855/03 - 3.2.4
Application Number: 97913550.6
Publication Number: 0961578
IPC: A01K 11/00
Language of the proceedings: EN
Title of invention: Ear tag applicator
Applicant: Gardner, Michael Stuart
Opponent: -
Headword: Ear tag/GARDNER
Relevant legal provisions: EPC Art. 56
Keyword: "Inventive step (yes)"
Decisions cited: -
Catchword: -
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DECISION
of the Technical Board of Appeal 3.2.4
of 19 November 2004

Appellant: Gardner, Michael Stuart
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Decision under appeal: Decision of the Examining Division of the European Patent Office posted 27 February 2003 refusing European application No. 97913550.6 pursuant to Article 97(1) EPC.

Composition of the Board:
Chairman: M. Ceyte
Members: P. Petti
T. Bokor
Summary of Facts and Submissions

I. The European patent application No. 97 913 550.6 (PCT/NZ 97/00155) was refused by a decision of the Examining Division dispatched on 27 February 2003.

The reasons for the refusal were that the subject-matter of the independent claim then under consideration lacked inventive step with respect to documents US-A-5 462 554 (D2) and WO-A-83/01177 (D1).

II. The applicant (hereinafter appellant) lodged an appeal against this decision on 23 April 2003 and simultaneously paid the appeal fee. The statement setting out the grounds of appeal was filed on 1 July 2003.

III. Oral proceedings were held on 19 November 2004.

During the oral proceedings the appellant filed an amended claim 1 which reads as follows:

"1. An ear tag applicator (1) including a first jaw portion (2), provided with an elongate pin (7) adapted, in use, to engage within a cavity of a male portion (50) of an animal ear tag, a second jaw portion (3) adapted, in use, to engage and carry a female portion (51) of said ear tag, first and second handle portions (4),(5), said first handle portion (4) being connected to said second jaw portion (3), with the handles (4),(5) and jaws (2),(3) acting about a common pivot (6), to move said first and second jaw portions (2),(3) such that movement of said first handle portion (4) with respect to said second handle portion (5) drives
the first and second jaw portions (2), (3) towards each other, in use, to drive said male portion (50) of said ear tag through an animal's ear and engage it with the female portion (51) held by the second jaw portion (3) on an opposite side of said animal's ear, the pin (7) having a proper stable position in which it can drive the male portion (50) of the ear tag through the animal's ear, biasing means (16) to bias said jaw portions (2,3) to an open position, a latch means (30) operatively connecting the first jaw portion (2) to the second handle portion (5), the latch means (30) being disengaged only after full engagement of the male (50) and female (51) portions of the ear tag to cause said first jaw portion (2) to move under the action of the biasing means (16) to an open position independently of said handle portions (4,5); a longitudinal axis of the pin (7) being provided at a forward facing angle (A°) when said jaw portions (2,3) are in said open position such that said longitudinal axis is substantially perpendicular to the second jaw portion (3) as a tip (20) of the male portion of the tag (50) contacts the animal's ear, and the pin (7) moving beyond said substantially perpendicular position before the first jaw portion (2) is released, due to disengagement of the latch means (30), to move to its open position, and wherein the pin (7) is flexible or pivotally connected, with the longitudinal axis of the pin (7) passing behind its pivot axis, to said first jaw portion (2) so that said pin (7) having the tag mounted thereon can rotate at least partially from its stable position outwardly from said first jaw portion (2) in response to a force transverse to the elongated pin (7)."
IV. The appellant essentially argued that the subject-matter of claim 1 was not rendered obvious by documents D1 and D2 taken in isolation or in combination.

V. The appellant requested that the appealed decision be set aside and a patent be granted on the basis of the following documents:

Claims: Claim 1 as filed during the oral proceedings on 19 November 2004, claims 2 to 10 as filed with letter dated 15 October 2004;

Description: pages 1, 4, 5, 8 and 10 as filed with the statement setting out the grounds of appeal, page 2 as filed with letter dated 15 October 2004, page 3 as filed during the oral proceedings, pages 6, 7, 9 and 11 of the application as filed;

Drawings: Figures 1 to 5, 6A, 6B and 7 to 11 of the application as filed.

Reasons for the Decision

1. The appeal is admissible.

2. Amendments

2.1 The amended claim 1 filed during the oral proceedings is directed to an ear tag applicator having the following features:
The ear tag applicator (1) includes a first jaw portion (2),

the first jaw portion (2) is provided with an elongate pin (7),

the elongate pin (7) is adapted, in use, to engage within a cavity of a male portion (50) of an animal ear tag,

the ear tag applicator includes a second jaw portion (3),

the second jaw portion (3) is adapted, in use, to engage and carry a female portion (51) of said ear tag,

the ear tag applicator includes first and second handle portions (4, 5),

said first handle portion (4) is connected to said second handle portion (3) with the handles (4, 5) and jaws (2, 3) acting about a common pivot (6) to move said first and second jaw portions (2, 3) such that movement of said first handle portion (4) with respect to said second handle portion (5) drives the first and second jaw portions towards each other, in use, to drive said male portion (50) of said ear tag through an animal's ear and to engage it with the female portion (51) held by the second jaw portion (3) on an opposite side of said animal's ear,
the pin (7) has a proper stable position in which it can drive the male portion (50) of the ear tag through the animal's ear,

the ear tag applicator includes biasing means (16) to bias said jaw portions (2, 3) to an open position,

the ear tag applicator includes a latch means (30) operatively connecting the first jaw portion (2) to the second handle portion (5),

the latch means (30) is disengaged only after full engagement of the male (50) and female (51) portions of the ear tag to cause said first jaw portion (2) to move under the action of the biasing means (16) to an open position independently of said handle portions (4, 5),

a longitudinal axis of the pin (7) is provided at a forward facing angle \((A^\circ)\) when said jaw portions (2, 3) are in said open position such that said longitudinal axis is substantially perpendicular to the second jaw portion (3) as a tip of the male portion of the tag contacts the animal's ear,

the pin (7) moves beyond said substantially perpendicular position before the first jaw portion (2) is released, due to
disengagement of the latch means (30), to move to its open position,

(A14) the pin is flexible or pivotally connected to said first jaw portion (2) so that said pin (7) having the tag mounted thereon can rotate at least partially from its stable position outwardly from said first jaw portion (2) in response to a force transverse to the elongated pin (7),

(A112) the longitudinal axis of the pin passes behind its pivot axis.

2.2 Claim 1 differs from claim 1 of the application as filed (hereinafter Aaf) in that

(i) features A1, A11, and A111 have replaced feature in claim 1 of the Aaf according to which "the first jaw portion (2) is adapted to engage a portion of an animal ear tag",

(ii) features B1 and A112 have been added,

(iii) feature C1, F and F1 have replaced the features in claim 1 of the Aaf according to which "said first and second handle portions (4, 5) are capable of moving said first and second jaw portions (2, 3) such that movement of said first handle portion (4) with respect to said second handle portion (5) drives the first and second jaw portions towards each other to engage said portion of said ear tag with an animal's
ear" and "said first jaw portion (2) can move under the action of the biasing means (16) to an open position independently of said handle portions but only after the portion of the ear tag has fully engaged with the animal's ear".

(iv) features A12, A13 and A14 have been added.

2.2.1 Feature A1, B1, A11, A111 and A112 can be derived from claims 2, 13 and 17 of the Aaf in conjunction with a passage on page 9 (lines 3 to 6) of the description of the Aaf. Feature C1 can be derived from the drawings and from the passage on page 5, lines 1 to 5 of the Aaf. Features F and F1 can be derived from claim 6 of the Aaf in conjunction with the drawings (Figure 5). Features A12 and A13 can be derived from the description of the Aaf (page 7, lines 14 to 22 in conjunction with page 8, lines 20 to 25). Feature A14 can be derived from claims 2 and 3 of the Aaf.

2.3 Dependent claims 2 to 10 correspond to claims 4, 5, 7 to 12 and 16 of the Aaf.

2.4 Furthermore, the description has been brought into conformity with the amended claims.

2.5 The board is satisfied that the claims comply with the requirements of Article 84 and that the amendments do not contravene Article 123 (2) EPC.
3. **Novelty**

The subject-matter of claim 1 is novel not only over documents D1 and D2 (as it is apparent from the assessment of inventive step in the following section 4) but also over the further documents cited in the search report.

4. **Inventive step**

4.1 Document US-A-5 462 554 (D2) is considered as representing the closest prior art, i.e. the primary information source which constitutes for the skilled person the most promising spring board towards the invention.

This document discloses an ear tag applicator suitable for applying a two-piece ear tag (see Figures 5 and 6) and provided with the following features:

- the ear tag applicator includes a first jaw portion 5;
- the first jaw portion 5 is provided with an elongate pin 16;
- the elongate pin 16 is adapted, in use, to engage within a cavity of a male portion 22 of an animal ear tag;
- the ear tag applicator includes a second jaw portion 4;
- the second jaw portion 4 is adapted, in use, to engage and carry a female portion 23 of said ear tag,
- the ear tag applicator includes first and second handle portions 2, 3;
the first handle portion 2 is connected to the second handle portion 3, with the handles and the jaws acting about a common pivot to move said first and second jaw portions 2, 3 such that movement of said first handle portion with respect to said second handle portion drives the first and second jaw portions towards each other, in use, to drive said male portion 22 of said ear tag through an animal's ear and to engage it with the female portion 23 held by the second jaw portion 4 on an opposite side of said animal's ear;

- the pin 16 has a proper stable position in which it can drive the male portion 23 of the ear tag through the animal's ear,

- the ear tag applicator includes biasing means to bias said jaw portions to an open position;

- the pin is pivotally connected to the first jaw portion so that said pin having the tag mounted thereon can rotate at least partially from its stable position outwardly from said first jaw portion in response to a force transverse to the elongated pin;

- the longitudinal axis of the pin passes behind its pivot axis.

The applicator known from document D2 uses an elongated pin which may pivot outwardly so as to release the tag from the animal's ear. However, this applicator is not provided with means allowing the jaw portions to open independently of the handle portions. Thus, if the operator does not open at least partially the jaws, the ear tag can jam in the applicator and injure the animal's ear.
In the known application the rotatable pin for supporting the one-piece tag is initially not perpendicular to the first jaw portion but pointing backwards towards the handle pivot of the applicator. The one-piece tag is driven into the animal's ear with the pin in this position, that is diagonal to the second jaw portion until the jaws are completely closed. There is a natural tendency for the animal to pull away at this point and also for the operator to move away having completed the operation. This is allowed by the pin pivoting and moving through the perpendicular position and hence to a forward facing position when the pin is generally aligned with the first jaw portion as shown in Figure 2 of document D2. As the pin rotates from its position pointing backwards to its position pointing forwards, the one-piece tag is pushed further through the animal's ear.

In the case of a two-piece tag where the male tag is disposed on the pin and the female tag is supported by the second jaw, as the pin rotates from its backwards pointing position the male portion of the tag will try to penetrate further into the female portion of the tag. Thus the female portion of the tag may be damaged and, if the operator holds the application firmly, a torn ear will result.

4.2 The subject-matter of claim 1 is distinguished from the content of document D2 essentially by features F, F1 and A12.

4.2.1 Features F and F1 result in providing a tag applicator whose jaw portions, after application of the tag, can move to their open position independently of the handle
portions. These features co-operate with feature A14 to reduce the likelihood of the ear tag jamming in the applicator and injuring the animal's ear.

Feature A12 results in reducing the force necessary to pierce the animal's ear. Moreover, also this feature co-operate with feature A14 to reduce the amplitude of the movement of the elongated pin from its stable position outwardly from the first jaw portion so as to prevent damage of the tag and injury of the animal's ear when a two-piece tag is applied.

Therefore, the technical problem to be solved is to provide an applicator for applying two-piece eartags which overcomes the disadvantages of the prior art so as to prevent injury to the animal as well as damage of the eartag.

4.3 Document WO-A-83/01177 (D1) discloses an ear tag applicator for one-piece ear tags including two jaw portions 8 and 9, two handle portions 1 and 2 and a latch means 10 operatively connecting the first jaw portion 9 to the second handle portion 2, the latch means 10 being disengaged only after fixation of the ear tag in the animal's ear to cause the first jaw portion 9 to move under the action of a biasing means 20 to an open position independently of said handle portions 1 and 2 (see particularly page 7, lines 11 to 33 and Figure 1).

The first jaw portion 9 of the ear tag applicator known from this document is provided with a rigid arcuate applicator blade 22. When the handle portions 1 and 2 are actuated, the blade 22 protrudes into a slot 21
provided in the second jaw portion 8 to pierce the animal's ear and apply the ear tag. A problem with this kind of applicator is the lateral pull on blade and tag as a result of the animal and operator moving apart preventing the jaws opening and causing injury of the animal's ear. Thus, the skilled person confronted with the problem to be solved would not take into consideration the teaching of document D1.

4.3.1 Having regard to the comments in the above section 4.2, document D1 suggests the use of a latch means as defined by features F and F1. However, this document does not suggest feature A12.

According to this feature, the elongated pin is arranged substantially perpendicularly to the second jaw as the tip of the male portion of the tag contacts the animal's ear. In the closed position of the jaws, before the first jaw is released, the pin is thus approximately perpendicular to the first jaw portion so that the pin rotates from this approximately perpendicular position to its forward pointing position. Therefore there will be in essence no tendency for the male portion of the tag to further penetrate into the female portion of the tag, thus avoiding damage of the tag and injury of the animal's ear due to the resistance to the pivoting movement of the pin.

Therefore, even if the skilled person were to combine the teaching of document D1 to the ear tag applicator according to the closest prior art, he would not arrive at the claimed subject-matter.
4.4 Thus, the subject-matter of claim 1 involves an inventive step within the meaning of Article 56 EPC.

Dependent claims 2 to 10 concern particular embodiments of the invention claimed in claim 1 and are likewise allowable.

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 stated in section V above.

The Registrar:     The Chairman:

G. Magouliotis     M. Ceyte