Datasheet for the decision of 8 December 2006

Case Number: T 0564/03 - 3.2.05
Application Number: 97934780.4
Publication Number: 0923300
IPC: A22C 17/04
Language of the proceedings: EN

Title of invention:
Apparatus for separating meat from bones comprising meat remainders

Patentee:
TOWNSEND ENGINEERING COMPANY

Opponent:
Machinefabriek Amersfoort b.v.

Headword:
-

Relevant legal provisions:
EPC Art. 54, 56

Keyword:
"Novelty, inventive step (yes)"

Decisions cited:
-

Catchword:
-
Case Number: T 0564/03 - 3.2.05

DECISION of the Technical Board of Appeal 3.2.05 of 8 December 2006

Appellant: Machinefabriek Amersfoort b.v. Handelsweg 6 NL-3401 ME IJsselstein (NL)

Representative: De Hoop, Eric Octrooibureau Vriesendorp & Gaade B.V. P.O. Box 266 NL-2501 AW Den Haag

Respondent: TOWNSEND ENGINEERING COMPANY 2425 Hubbell Avenue Des Moines, IA 50317 (US)

Representative: Van den Heuvel, Henricus Theodorus Patentwerk B.V. P.O. Box 1514 NL-5200 BN 's-Hertogenbosch (NL)

Decision under appeal: Decision of the Opposition Division of the European Patent Office posted 20 March 2003 rejecting the opposition filed against European patent No. 0923300 pursuant to Article 102(2) EPC.

Composition of the Board:

Chairman: W. Moser
Members: W. Zellhuber P. Michel
Summary of Facts and Submissions

I. The appellant (opponent) lodged an appeal against the decision of the Opposition Division rejecting the opposition filed against the European patent No. 0 923 300.

II. The Opposition Division held that the grounds for opposition submitted by the appellant under Article 100(a) EPC (lack of novelty, Article 54 EPC, and lack of inventive step, Article 56 EPC) did not prejudice the maintenance of the patent in suit as granted.

III. The appellant requested that the decision under appeal be set aside and that the patent in suit be revoked in its entirety. He further requested oral proceedings in case the Board of Appeal did not intend to set aside the decision under appeal and did not decide to revoke the patent in its entirety.

The respondent (patent proprietor) requested that the appeal be dismissed. He further requested oral proceedings in case the Board of Appeal did not intend to dismiss the appeal.

IV. In an annex to the summons to oral proceedings dated 19 May 2006, the provisional opinion of the Board concerning the issues of novelty and inventive step in respect of the subject-matter of claims 1 and 20 was notified to the parties.

V. On 18 August 2006, the representative of the appellant informed the Board that the appellant would not attend
the oral proceedings scheduled for 21 September 2006. By a communication dated 28 August 2006, the Board notified the parties that the oral proceedings had been cancelled.

VI. Independent claims 1 and 20 of the patent in suit as granted read as follows:

"1. Apparatus (1) for separating meat from bones comprising meat remainders, comprising:
   - a cylinder (25) with a cylinder wall (6, 12, 18, 19);
   - a piston (10) movable into the cylinder (25);
   - infeed means (7) for carrying bones comprising meat remainders into the cylinder (6);
   - a plurality of holes (27) arranged in the cylinder wall (12, 19) for passage of meat out of the cylinder (25) placed under pressure;
   - outfeed means for discharging bones from the cylinder (25); and
   - a drive device (16,17) for driving the piston (10),
   characterized in that
   - the diameter of said cylinder wall holes (27) lies between 3 mm and 12 mm; and
   - the drive device (16,17) is adapted to apply a pressure in the cylinder (25) with a magnitude of between 30 bar and 120 bar."

"20. Method for separating meat from bones comprising meat remainders, comprising the following steps of:
   - carrying bones comprising meat remainders into a cylinder with a cylinder wall;
- generating a pressure in the cylinder by means of a piston movable into the cylinder and a drive device connected thereto so that the meat mass is pressed out through holes arranged in the cylinder wall; and
- discharging the bones from the cylinder, characterized in that the meat is pressed through said cylinder wall holes having a diameter of between 3 mm and 12 mm with a pressure of a magnitude between 30 bar and 120 bar."

VII. The following documents are referred to in the present decision:

A1: Declaration of Mr. Dirk Hermanus Dekker of 22 March 2002, including exhibits A to L;
A2: NL-A 7802947;
A3: GB-A 1 563 750;
A7: Letter of Mr. Harold T. Hodges of 8 July 2002;
A23: Affidavit of Mr. Harold T. Hodges of 17 June 2003;
A26: Declaration of Mr. Dirk Hermanus Dekker of 10 July 2003;
Annex L1: Hydrau-Separator HS200 and HS250, function description, submitted by the patent proprietor on 27 December 2002;

VIII. In the written procedure, the appellant argued essentially as follows:

On 23 June 1995, Mr Dekker had demonstrated and tested an apparatus for separating meat from bones at John &

The apparatus (Hydrau-Separator model 250, machine number: HS 250-85) corresponded to an apparatus according to the preamble of claim 1 of the patent in suit (cf. document A1, exhibit B). Furthermore, it had been provided with a filter having holes of a diameter of 8 mm (cf. document A1, exhibit G). These facts were disputed neither by the respondent nor by the Opposition Division.

The Opposition Division, however, had found that it had not been unambiguously shown that the drive device of that apparatus had been adapted to apply a pressure in the cylinder with a magnitude of between 30 bar and 120 bar.

The apparatus HS 250-85 included a pressure switch allowing three pre-installed pressure values to be defined. During demonstration runs at John Morrell & Company, the pre-installed selectable pressure values (L,M,H) had been 120, 140 and 160 bar (cf. document A23), and Mr Dekker had actually changed the settings and demonstrated the apparatus in operation with these changed settings (cf. document A26, point 8 of the declaration).

Furthermore, the apparatus HS 250-85 had been provided with a hydraulic pump of the type A4VSO250LR2G having a range of settings between 50 and 350 bar (cf. document A1, declaration in connection with exhibit C, page 2), which together with the pressure switch, electronics card VT 3000 and valves, provided a drive device adaptable to apply different pressures (cf. document
A26, points 5 to 7 of the declaration), thus adaptable to apply a pressure between 30 and 120 bar.

As it had been very easy to adapt the pressure settings of the drive device (cf. document A26), and as it was evident from the specification of the pump (cf. document A1, exhibit C, page 2, left column) that pressure settings as low as 50 bar could be set, the pressure settings of claims 1 and 20 were not novel, and, therefore, the subject-matter of claims 1 and 20 of the patent in suit lacked novelty.

Furthermore, it had been well known to a person skilled in the art to apply lower pressure settings, and, in fact, any maintenance engineer could adjust the pressure of an apparatus of the type HS 250 to a higher pressure setting in order to obtain higher productivity, or to a lower pressure setting in order to obtain better meat quality. Thus, using (lower) pressure values as claimed in claims 1 and 20 of the patent in suit did not give rise to an inventive step.

IX. In the written procedure, the respondent argued essentially as follows:

An apparatus and a method according to the preambles of claims 1 and 20, respectively, of the patent in suit were known from inter alia document A3.

The present invention related to the insight that, rather than optimising the quantity of the resulting meat mass, optimising revenues from the resulting products of the separation of bones and meat remainders should be the goal. This resulted in a combination of
various elements of separating bones and meat remainders, most of which individually had been known but the combination of which was novel and against the doctrine in the art and led away from developments in the art. Therefore the claims should be considered as a whole and not their elements individually.

The subject-matter of claims 1 and 20 of the patent in suit was therefore novel and involved an inventive step.

As regards the alleged prior use, i.e. the tests carried out by Mr Dekker, cf. documents A1, A7, A23 and A26, the following had to be considered.

According to document A1, exhibit C, heading on page 1, the hydraulic pump of the type A4VSO250LR2G allegedly used in these tests had a nominal pressure of 350 bar and a peak pressure of 400 bar. Such a pump would not have been used, and during the tests had not been used, for pressures between 30 and 120 bar. As regards the pressure settings, the respective indications in document A7 of Mr Hodges ("approximately 100 to 225 bar") on the one hand, and in document A23 of the same Mr Hodges and document A1 (exhibit I, test results) of Mr Dekker (120, 140 and 160 bar), on the other, were contradictory.

Moreover, the pressure values mentioned in these documents concerned the pump pressures, whilst the pressure ranges indicated in claims 1 and 20 of the patent in suit related to the pressure in the cylinder comprising the meat remainders. As shown in annex L1 and annex L2, the pump pressures mentioned in the declarations of Mr Dekker and Mr Hodges could not be
compared with the pressures claimed in claims 1 and 20 of the patent in suit. The pump pressures had to be multiplied by a factor of 1.2544.

Furthermore, tests of the type as referred to in documents A1, A7, and A23 were normally understood to be secret. The results could lead to commercial advantages that were clearly to be kept confidential among the participating parties.

**Reasons for the Decision**

1. **Novelty**

None of the cited documents discloses an apparatus or a method including in combination all the features of claims 1 and 20, respectively, of the patent in suit.

In particular, documents A1, A7, A23, and A26, all relating to the alleged prior use, are silent about the pressures which had actually been applied in the cylinder of the apparatus HS 250-85. The pressure values of 120, 140, and 160 bar (L, M, H) mentioned in document A1 (exhibit I) and document A23 correspond to the hydraulic pressure settings, and these settings controlled the pressure delivered by the hydraulic pump, cf. document A23, fourth paragraph and document A26, last sentence of point 7. As explained in annex L2, and as pointed out in point I.2 of the decision under appeal, these pump pressure values differ from the pressures in the cylinder due to the difference between the working surfaces of the piston on the drive side (pump side) and the process side.
Furthermore, the pump of the apparatus used in the course of the alleged prior use was adapted to deliver pressures of 120, 140 or 160 bar, whilst other pressures would have required a modification of the apparatus, cf. documents A23 and A26. The documents produced by the appellant are silent as to whether or not the apparatus actually had been modified so as to adapt the apparatus in order to apply pressures in the cylinder within the range claimed in claims 1 and 20 of the patent in suit.

The subject-matter of claims 1 and 20 of the patent in suit as granted is thus novel with regard to the alleged prior use.

2. Inventive step

2.1 Leaving aside the question of whether or not the subject-matter of the alleged prior use has been made available to the public, the apparatus HS 250-85 and its demonstration on 23 June 1995 at John Morell & Company represents the closest prior art. An apparatus of that type is shown in document A1, exhibit B. It comprises a cylinder with a cylinder wall 2 including a plurality of holes, a piston 3 movable into the cylinder, infeed and outfeed means and a drive device 7 for driving the piston. According to document A1, exhibits G and H, the diameter of the holes was 8 mm, and according to document A1, exhibit I, and document A23, the drive device (hydraulic pump) was adapted to deliver pressures of 120, 140 and 160 bar. As shown in annexes L1 and L2, these pump pressure values have to be multiplied with factor 1.2544 in order to determine
the respective actual pressure values in the cylinder. Consequently, the apparatus used in the course of the alleged prior use was adapted to apply pressures of approximately 150, 175 and 200 bar in the cylinder.

2.2 The object of the patent in suit is to provide an apparatus and a method wherein the quality of the meat separated from the bones is improved, cf. paragraphs [0005] and [0007] of the patent in suit.

The object is achieved by an apparatus and a method including in combination the features of claims 1 and 20, respectively, of the patent in suit.

2.3 Neither the documents relating to the alleged prior use nor the documents further cited by the appellant comprise any incentive to apply in combination the features of providing cylinder wall holes having a diameter of between 3 mm and 12 mm and applying pressures in the cylinder with a magnitude of between 30 bar and 120 bar, thus giving rise to advantages as set out in paragraphs [0006] to [0011] of the patent in suit as granted.

In particular, the documents relating to the alleged prior use do not contain any hint to apply pump pressures lower than those explicitly cited. In the Board's judgement, the mere fact that the pressure settings of the pump could be modified and that the setting range of a pump of the type as used in the apparatus generally was between 50 and 350 bar, cannot be regarded as an incentive for providing an apparatus for separating meat from bones, wherein the drive
device is adapted to apply pressures in the cylinder with a magnitude of between 30 bar and 120 bar.

Document A2 is silent about the diameter of the cylinder wall holes as well as the pressures applied. Document A3 teaches applying pressures of at least 200 atmospheres, cf. page 2, lines 124 to 128, and holes having a diameter of up to 4 mm, cf. page 3, lines 13 to 19.

The other documents cited by the appellant do not go beyond the disclosure of documents A2 and A3 or the subject-matter of the prior use allegedly made available to the public at John Morrell & Company on 23 June 1995. The appellant cited a large number of documents mainly comprising unsubstantiated fragmentary statements and observations of various people reflecting what allegedly had been done or tested in former days.

2.4 Therefore, the subject-matter of claims 1 and 20 of the patent in suit as granted involves an inventive step. The subject-matter of claims 2 to 19 and 21 to 25, which are appendant to independent claims 1 and 20, respectively, similarly involves an inventive step.

3. Since the subject-matter of the alleged prior use does not prejudice the maintenance of the patent in suit as granted, there was no need to evaluate whether or not it had been made available to the public before the priority date of the patent in suit.

4. In accordance with the established jurisprudence of the boards of appeal, the statement of the representative
of the appellant that the appellant would not attend the oral proceedings, which he had previously requested as an auxiliary measure, is to be treated as equivalent to a withdrawal of the auxiliary request for oral proceedings. Since the respondent also requested oral proceedings as an auxiliary measure, and the Board intended to decide in favour of the respondent as has already been anticipated in the annex to the summons to oral proceedings (cf. paragraph IV above), the oral proceedings to be held on 21 September 2006 could be dispensed with.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:      The Chairman:

D. Meyfarth       W. Moser