Datasheet for the decision
of 3 July 2012

Case Number: T 1576/10 - 3.2.04
Application Number: 03786440.2
Publication Number: 1583426
IPC: A22C 21/00, A22B 7/00, B65G 47/31

Language of the proceedings: EN

Title of invention:
Converting a fluctuating stream of poultry into a uniform
stream of poultry

Patentee: STORK PMT B.V.

Opponent:
Meyn Food Processing Technology B.V.

Headword:

Relevant legal provisions:
EPC Art. 100a)

Keyword:
"Novelty and inventive step (yes)"

Decisions cited:
T 0848/93

Catchword:
Case Number: T 1576/10 - 3.2.04

DECISION
of the Technical Board of Appeal 3.2.04
of 3 July 2012

Appellant: Meyn Food Processing Technology B.V.
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Decision under appeal: Interlocutory decision of the Opposition Division of the European Patent Office posted 5 July 2010 concerning maintenance of European patent No. 1583426 in amended form.

Composition of the Board:
Chairman: A. de Vries
Members: C. Scheibling
T. Bokor
Summary of Facts and Submissions

I. In its interlocutory decision posted 5 July 2010, the Opposition Division found that, taking into consideration the amendments made by the patent proprietor, the European patent and the invention to which it relates met the requirements of the EPC. On 16 July 2010 the Appellant (opponent) filed an appeal and paid the appeal fee. The statement setting out the grounds of appeal was received on 14 October 2010.

II. The patent was opposed on the grounds based on Article 100(a) EPC (lack of novelty and inventive step).

III. The following documents played a role in the present proceedings

D2: EP-A-0 441 633

IV. Oral proceedings before the Board took place on 3 July 2012.

V. The Appellant (Opponent) requests that the decision under appeal be set aside and the patent be revoked.

He mainly argued that the subject-matter of claims 1 and 37 of the main request lacks novelty with respect to D4 and that the subject-matter of claim 37 also lacks novelty with respect to D2. If the Board were to consider that D4 did not disclose to control the conveyor speed in order to reduce fluctuation of the
stream of poultry, than the subject-matter of claims 1 and 37 would nevertheless not involve an inventive step, since said features are part of the common general knowledge of the skilled person and are obvious from D3.

VI. The Respondent (Patentee) requests that the appeal be dismissed, alternatively that the decision under appeal be set aside and the patent be maintained on the basis of one of the auxiliary requests 1 or 2 filed with letter dated 1 June 2012.

He contested the arguments of the Appellant and submitted that none of the cited prior art documents discloses to reduce fluctuation of a stream of poultry by controlling the speed of a conveyor. This idea is not obvious to a skilled person since the prior art discloses various other solutions such as the use of buffers and gates. D3 does not suggest controlling the speed of the conveyor either.

VII. Claims 1 and 37 held allowable by the Opposition division reads as follows:

"1. Method for making a fluctuating stream of living poultry in a slaughter line substantially uniform, the slaughterline comprising an unloading station (10; 100; 720a), a conveying station (11) and a connecting station (17), wherein the poultry (29) is delivered to the unloading station (10; 100; 720a) in at least one holder (2; 74), wherein the poultry (29) is unloaded from the at least one holder (2; 74) in the unloading station, and is transferred to the conveying station (11), wherein (10; 100; 720a) the stream of poultry is formed, and wherein the conveying station (11) comprises at
least one conveyor device (8; 9; 41; 42; 124; 132; 134; 280; 282; 284; 286), wherein the stream of poultry is conveyed in the conveying station (11) and is transferred to the connecting station (17), where the poultry is connected to carriers (14), wherein the number of birds which is transferred per time unit to the conveying station (11) by the unloading station (10; 100; 720a) or to the connecting station (17) by the conveying station (11) is controlled in order to reduce fluctuations in the stream of poultry characterized in that the stream of poultry is conveyed at a conveying speed by the at least one conveyor device to the connecting station (17), the conveying speed of the at least one conveyor device being controlled in order to reduce fluctuations in the stream of poultry."

"37. Device for converting a stream of living poultry which fluctuates over the course of time into a stream of living poultry which is substantially uniform over the course of time in a slaughter line, the device comprising at least the following stations:
- an unloading station (10; 100; 720a) for unloading the poultry from at least one holder (2; 74),
- a connecting station (17) for connecting the poultry to carriers,
- a conveying station (11) for conveying the poultry as a stream of poultry from the unloading station to the connecting station, the conveying station comprising at least one conveyor device (8; 9; 41; 42; 124; 132; 134; 280; 282; 284; 286), wherein the device comprises at least one control device (35) which is constructed to control the number of birds which is transferred from the unloading station to the conveying station or from the conveying station to the connecting station per time
unit, in order to reduce fluctuations in the stream of poultry characterized in that at least one conveyor device is constructed to convey the poultry at a conveying speed, the control device (35) being linked to the at least one conveyor device and being constructed to control the conveying speed of the at least one conveyor device in order to reduce fluctuations in the stream of poultry."

Reasons for the Decision

1. The appeal is admissible.

2. Novelty

2.1 Novelty has been challenged with respect to D2 and D4.

2.2 D2 (column 4, lines 21 to 27; column 15, lines 22 to 45; Figure 1) discloses a device for stunning animals to be slaughtered at slaughterhouses which is suitable for processing poultry. This device and the corresponding procedure are concerned with "reducing the number of potential interruptions of work" (column 4, lines 25 to 27) and thus with reducing the fluctuations in the stream of animals. To this effect, D2 discloses a device for converting a stream of living animals which fluctuates over the course of time into a stream of living animals which is substantially uniform over the course of time in a slaughter line. This device comprises an unloading station (implicit) for unloading the animals from at least one holder, a connecting station (2f) for connecting the animals to carriers, a conveying station (1) for conveying the animals as a
stream from the unloading station to the connecting station, the conveying station comprising at least one conveyor device (1), wherein the device comprises at least one control device (claim 17) which is constructed to control the number of animals which is transferred from the conveying station to the connecting station per time unit, in order to reduce fluctuations in the stream of animals.

The Respondent contends that unloading only takes place at location 2f (see figure 1) because before arriving at this location, the animals are still kept in holders (boxes). The Board does not share this view. The boxes 2 and the endless transport path 1 are clearly part of a conveying station in the meaning of the patent under appeal. This is because they transport the animals from the inlet of the plant (unloading station) through a stunning pit at 3, to a connecting station comprising a conveyor 20 and an overhead conveyor 21 where the animals are suspended by their hind legs (column 12, line 60 to column 13, line 9; column 16, lines 18 to 29).

However, D2 does not disclose that the control device is linked to the at least one conveyor device and is constructed to control the conveying speed of the conveyor device in order to reduce fluctuations in the stream of animals.

In this respect, the Appellant referred especially to the passage in column 15, lines 22 to 49 disclosing a control unit which ensures that a box is taken from the waiting area and entered into the stunning pit when there is room in the pit and when at the same time a need for animals on the slaughtering line may be
foreseen. He concluded that this is a control of the conveyor device in order to reduce fluctuations in the stream of animals.

However, what is claimed is "to control the conveying speed of the conveyor device". This means that it must be possible to adjust the speed of the conveyor device by increasing or decreasing it when necessary i.e. an adaptive speed control. In D2 the boxes are taken from the waiting area one by one when needed. This means that the conveyor device which transports the boxes operates in an ON/OFF mode. This is not a "speed control" in the meaning of the patent under appeal.

It is noted that neither paragraph [0046] of the patent under appeal nor claims 43 and 44 or Figure 11a are in contradiction with this interpretation and do not lead to another finding. According to the embodiment disclosed in paragraph [0046] the conveyors are controlled so that the stream is interrupted periodically allowing intermittent streams of poultry to be combined to form an uniform stream; this does not imply that the conveyor means is simply operated in an ON/OFF mode without any adaptive speed control. As is clear from the patent specification paragraphs [0160] to [0162] where the relevant embodiment is described in more detail, this refers to an arrangement in which periods of adaptive speed control as claimed are alternated with periods of constant speed (of conveyor 41, figure 4) resulting in a discontinuous or "intermittent" stream, with poultry being fed uniformly, then stopped, then fed uniformly etc. Two such streams can be combined to form a continuous uniform flow of birds, patent specification paragraph [0162]. In this
embodiment there is thus still adaptive speed control but it is intermittent.

Claim 43, 44 and Figure 11a relate to an embodiment where, depending on the number of birds present in the buffer, the speed of conveyor belt 8 is decreased or increased (paragraphs [0262] and [0263]). This arrangement is still clearly within the scope of the independent claims.

The Appellant also referred to the fact that the conveyor which transports the boxes through the stunning pit is run at an even, slow speed so that each box gets the same time of stay in the pit (column 15, lines 39 to 45). This implies, in his view, the control of the conveyor speed to a constant value.

In the Board's view this need not be so: speed could also be maintained at a more or less constant level using a simple mains powered electric motor without a control system. There is thus no unambiguous disclosure of this type of control in D2. In any case, controlling a speed to remain constant is not the same as the adaptive speed control in the meaning of the patent under appeal (see above).

Thus, the subject-matter of claim 37 is novel with respect to D2.

2.3 Since D2 refers to animals in general and more specifically to pigs, the method claim 1 which relates to poultry cannot be anticipated by D2. This is because "a method for making a fluctuating stream of living poultry in a slaughter line substantially uniform" does
not mean that the method is merely "suitable for ..." but that it comprises a functional feature concerning "making a fluctuating stream of living poultry in a slaughter line substantially uniform" (see T 848/93), i.e. it is specifically adapted for poultry.

2.4 Leaving aside the question whether ostriches and other ratites can be considered as "poultry", the question with respect to D4 is mainly, whether it discloses the features of the characterising parts of the independent claims 1 and 37, i.e. that the stream of poultry is conveyed at a conveying speed by the at least one conveyor device to the connecting station, the conveying speed of the at least one conveyor device being controlled in order to reduce fluctuations in the stream of poultry (as required by claim 1) and that at least one conveyor device is constructed to convey the animals at a conveying speed, where the control device is linked to the at least one conveyor device and constructed to control the conveying speed of the conveyor device in order to reduce fluctuations in the stream of animal (as required by claim 37).

In D4 (Figure 3) the "poultry" is unloaded and kept in holding pens 28 from which the animals are led in a common aisle way 35, directed to a turntable 36 divided into confinement sectors 44 and delivered in a regulated flow to an aisle way 42. The aisle ways 35 and 42 may be provided with moving means such as an escalator apparatus (column 5, lines 3 to 31). It is further indicated that "any conventional escalator apparatus which can handle the weight and control parameters with respect to the present invention may be utilized". 
2.4.1. It is firstly noted that a turntable is not a "conveyor" in the normal or usual sense of that term. The turntable rather has the function of a buffer for receiving and storing the ratites before delivering them one by one into the aisle 42 (column 5, line 11). Moreover, there is no unambiguous disclosure of any speed regulation of the turntable. It is solely indicated that the turntable can be rotated manually, hydraulically, electrically or otherwise by a facility worker (column 5, lines 12 to 15). Even if the turntable is said to regulate the flow (column 5, line 18), this is due to the turntable's confinement sectors which deliver the ratites one by one into the aisle way 42. It is not linked to any form of speed control of the turntable. This also illustrates that "regulating flow" is not synonymous with or does not imply "controlling conveyor speed". Flow, in this case number of animals passing a certain point per unit time, depends on various factors, e.g. the rate at which birds are delivered or unloaded onto the conveyor, their spacing etc, as well as the speed at which they are conveyed. All these factors may be used to regulate the flow.

2.4.2 The Appellant further argued that the "control parameters" referred to in column 5, line 30, with respect to the escalator apparatus disposed in aisle ways 35 and 42 are an implicit reference to a speed control of these conveyors. This however is not convincing; read in the context of coordinating operation of the escalator and the turntable "control parameter" most likely means nothing more than "stop and start" of the escalator apparatus. As already explained running a conveyor in a stop and
start mode is not a "speed control" in the meaning of the patent under appeal.

2.4.3 Accordingly, D4 fails to disclose a control of the speed of a conveyor device in order to reduce fluctuations in the stream of poultry. Thus, the subject-matter of claims 1 and 37 is novel with respect to D4.

3. Inventive step

3.1 The Appellant considered D4 to be the closest prior art.

3.2 The subject-matter of the independent claims 1 and 37 differs from the disclosure of D4 in essence in that the conveying speed of the at least one conveyor device is controlled in order to reduce fluctuations in the stream of poultry.

3.3 D4 already provides a device and a method where the stream of poultry is controlled in order to reduce fluctuations in the stream of poultry. The problem the invention seeks to solve with respect to D4 can be seen in proposing an alternative solution to reduce fluctuations in the stream of poultry.

3.4 The Appellant contended that the skilled person faced with the problem of reducing fluctuations would immediately understand that reducing fluctuations means obtaining a continuous regular delivery of poultry and that he must therefore act on the supply means, i.e. the conveyor device. The sole manner to obtain a continuous "output" when the "input" is irregular is to vary the delivery speed.
The Board cannot follow this line of argument. In fact the skilled person is not in a so called "one-way-street-situation" which could result from a lack of alternatives. In the present case there are other options for regulating flow such as the use of a buffer area (as in D2), gates (as in D4) or convergent means (as in further D3). Accordingly, the skilled person would not have been prompted to a speed control regulation of the transport means (conveyor).

The Appellant also referred to the teaching of D3. D3 (page 5, line 37 to page 6, line 3) discloses the use of a "regulator conveyor" to control the rate and distribution of the objects conveyed. However, D3 cites only one example (see page 8, lines 16 to 19), where these results are obtained by "channelling them [the poultry] through convergent means (not shown)". There is no disclosure of any speed regulation of the conveyor. It is true that claim 17, which refers to the convergent guide means, does not refer back to claim 16, which indicates that the regulator conveyor controls rate and distribution, but to claim 15. However, this does not appear of any significance, as in claim 17 "the regulator conveyor" has no precedent in claim 15, and most likely should have been made dependent on claim 16 which first mentions "a regulator conveyor". In any case, even if it did envisage an alternative to the convergent means, what exactly was envisaged is not disclosed or self-evident. Thus, a speed control regulation of the conveyor device is neither disclosed nor suggested in D3.

Consequently, starting form D4 as closest prior art and taking into consideration the teaching of D3 and his
common general knowledge, the skilled person would not arrive in an obvious manner at the claimed invention.

3.5 For the sake of completeness, D1 (Figure 1) comprises a feed-regulating disc (1) to reduce fluctuations in the stream of poultry, which delivers the poultry to conveyors (2, 3) and ultimately to a connecting station. There is no disclosure of any speed control, be it of the feed-regulating disc or the conveyor devices. Thus, D1 in combination with the teaching of D3, even if taking into consideration the common general knowledge of the skilled person, cannot lead in an obvious manner to the claimed invention either.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: G. Magouliotis
The Chairman: A. de Vries