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Datasheet for the decision of 24 September 2021

Case Number: T 2856/18 - 3.2.04

14182231.2 Application Number:

Publication Number: 2818050

IPC: A22C21/00

Language of the proceedings: ΕN

Title of invention:

Conveying assembly

Patent Proprietor:

Marel Stork Poultry Processing B.V.

Opponent:

Meyn Food Processing Technology B.V.

Headword:

Relevant legal provisions:

EPC Art. 76(1), 83, 54, 56

Keyword:

Amendments - extension beyond the content of the parent application as filed (no)
Sufficiency of disclosure - (yes)
Novelty - (yes)
Inventive step - (yes)

Decisions cited:

G 0007/95

Catchword:



Beschwerdekammern Boards of Appeal Chambres de recours

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Case Number: T 2856/18 - 3.2.04

DECISION
of Technical Board of Appeal 3.2.04
of 24 September 2021

Appellant: Meyn Food Processing Technology B.V.

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Decision under appeal: Decision of the Opposition Division of the

European Patent Office posted on 11 October 2018 rejecting the opposition filed against European patent No. 2818050 pursuant to Article 101(2)

EPC.

Composition of the Board:

W. Van der Eijk

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Summary of Facts and Submissions

- The appeal was filed by the appellant (opponent) against the decision of the opposition division to reject the opposition filed against the patent in suit.
- II. In a communication in preparation for oral proceedings the Board set out its preliminary opinion on the relevant issues.
- III. Oral proceedings before the Board were duly held on 24 September 2021.
- IV. The appellant (opponent) requested that the decision under appeal be set aside and that the European patent No. 2818050 be revoked.
- V. The respondent (patent proprietor) requested that the appeal be dismissed and the patent thus be maintained as granted (main request) or, auxiliarily, maintained on the basis of one of auxiliary requests 1 to 3, filed with the reply to the grounds of appeal on 15 May 2019.
- VI. The claims of the main request relevant for this decision read as follows:
 - "1. Conveying assembly (40; 200) comprising an overhead conveyor (49; 201) utilizing shackle assemblies (48; 210) for transporting poultry carcasses (45; 2012) through a processing plant, said overhead conveyor including a track (41 a; 202) and a series of trolleys (41 b; 204) hanging therefrom to travel therealong, said trolleys being interconnected by a drive chain (41 c; 206), wherein each trolley has a hanger (208) projecting downwardly therefrom, wherein each shackle

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assembly (48; 210) comprises a connection member (212) to connect to the hanger, an elongated rod (214) extending essentially vertically from the connection member and a leg-engaging retainer (216) at the lower end of the rod, wherein the conveying assembly further comprises a guide element (220) disposed generally horizontally below and essentially parallel to the overhead conveyor (201) to engage against the legengaging retainer (216) to prevent rotation of the shackle assemblies about an essentially vertical axis, characterized in that

the conveying assembly further comprises a guide chain (43; 232) disposed generally horizontally below and essentially parallel to the overhead conveyor (49; 201), which guide chain (232) is operable synchronously with drive chain (206) and is provided with stops (234) to abut against the leg-engaging retainer (216) to prevent rotation of the shackle assemblies (210) about an essentially horizontal rotation axis."

- "5. Conveying assembly according to claim 1, wherein rotation of the shackle assemblies about a horizontal rotation axis extending essentially perpendicular to the transport direction is prevented."
- "7. Conveying assembly according to claim 1, wherein the connection member (212) and the elongated rod (214) are embodied as a single piece, which is connected to the hanger (208) such that rotation about a horizontal rotation axis (213) is allowed."
- "8. Conveying assembly according to claim 1, wherein the leg-engaging retainer (216) is connected pivotably to the elongated rod (214), such that rotation about a horizontal rotation axis (215) is allowed."

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VII. In the present decision, reference is made to the following documents:

D1: US3416186 D2: US4195386 D3: GB1086063

VIII. The appellant-opponent's arguments can be summarised as follows:

The subject matter of granted claim 5 adds subject matter extending beyond the parent application. The invention according to granted claims 1, 7 and 8 is insufficiently disclosed. The term leg engaging retainer has no clearly defined meaning, so the term can be interpreted broadly to include the lower section of the elongated rod. With this interpretation, the subject matter of claim 1 as granted lacks novelty with respect to D3 or D1 and lacks inventive step starting from D1 combined with general knowledge or combined with D3 or starting from D2 combined with D1.

IX. The respondent-proprietor's arguments can be summarised as follows:

None of the objections raised against the patent as granted are convincing so the appeal should be dismissed. The skilled person would understand the term leg engaging retainer to mean only the framework of bars that holds poultry legs, and to be a separate part from the elongated rod. The inventive step objection starting from D2 with D1 is late filed so should not be admitted into the proceedings.

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Reasons for the Decision

- 1. The appeal is admissible.
- 2. Background of the invention

The invention relates to a conveying assembly (see published patent specification, paragraph [0001] and claim 1). The conveying assembly includes a drive chain for conveying birds on shackle assemblies that are suspended on trolleys from an overhead conveyor track. Each shackle assembly has an elongated rod that extends vertically from a member connecting it to the trolley and a leg engaging retainer at the lower end of the rod, for holding a poultry carcass by its legs. For some operations, such as slaughtering (see published patent specification, paragraph [0046]), it is advantageous to prevent rotation of the shackle assembly about a horizontal rotation axis extending perpendicular to the transport direction. To this end (see published patent specification, paragraph [0048] and claim 1), the invention proposes a guide chain running horizontally below the drive chain, to which it is synchronised, and provided with stops to abut against the leg-engaging retainer.

3. Main request, claim 5, extension of subject matter, Article 100(c) with 76(1) EPC

In its communication in preparation for the oral proceedings, the Board gave the following preliminary opinion on this matter:

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- 2.1 In the Board's view, the subject matter of claim 5 has a basis in the parent application as filed.
- 2.2 The feature of claim 5 (rotation [...] about a horizontal rotation axis extending essentially perpendicular to the transport direction is prevented) is taken almost word for word from page 10, lines 3 and 4.
- 2.3 The appellant-opponent argues (referring to the published parent application, WO2011126366A, page 9, line 37 to page 10, line 4) that the concept of preventing rotation explained there must be read in the context of the preceding sentence, that "further rotation" of the shackle assemblies must be prevented. According to the argument there is only basis for preventing a "further rotation" in the axis, not [absolutely] preventing rotation about a horizontal axis as claimed. The Board disagrees.
- 2.4 In the Board's view, the disputed wording prevent further rotation (published parent application, page 10, line 2) must be read in the context of arranging a guide chain below and essentially parallel to the conveying assembly, operating it synchronously with the conveyor and providing the former with stops that abut against the leg engaging retainers. Put differently, whatever rotation about an (unspecified) horizontal axis might have been possible without the leg retainers interacting with the guide chain and its stops, it is prevented about a horizontal axis when these elements are in place. The next sentence explains that, in particular, rotation about the horizontal axis essentially perpendicular to the transport direction is prevented.

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2.5 Claim 1 includes these elements that prevent rotation (synchronously operable guide chain, stops). Therefore, claiming that rotation about a horizontal axis perpendicular to the transport direction is prevented in claim 5 (cf. published parent application, page 10, lines 3 and 4) has a basis in the application as filed.

In the absence of any written or oral argument from the parties on this aspect of the communication, the Board sees no reason to deviate from its preliminary position. Therefore, the Board finds that the subject matter of claim 5 does not add subject matter extending beyond the parent application as filed.

- 4. Main request, claim 1, insufficient disclosure
- 4.1 Term leg engaging retainer
- 4.1.1 In its communication (see section 3), the Board gave the following opinion on this issue:

The appellant-opponent objects that the term has no well described meaning in the art and is not supported by the description and drawings. This argument pertains to an alleged lack of clarity and/or lack of support in the description (cf. Article 84 EPC). As such, this objection is not based on a ground for opposition and has no bearing on the issue of sufficiency of disclosure.

Moreover, as the appellant-opponent has correctly identified (grounds of appeal, page 4, point C. 10) the part referred to as a leg engaging retainer 216 is a complete part from which the poultry is suspended and is shown in detail in figure 12 (see also the published

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patent, paragraph [0103], where it is also described in detail). Therefore, the Board has no doubt that the patent gives the skilled person sufficient instruction as to how to carry out this aspect of the claimed invention.

- 4.1.2 In the absence of any written or oral comments to this aspect of the Board's communication, the Board confirms its preliminary opinion. Therefore, the Board finds the subject matter of claim 1 to be sufficiently disclosed.
- 4.2 Claims 7 and 8
- 4.2.1 The appellant-opponent saw a contradiction between claim 1, where rotation of the shackle assemblies about an essentially horizontal rotational axis is prevented, and claims 7 and 8 which respectively claim: "the elongated rod [...] is connected to the hanger such that rotation about a horizontal rotation axis is allowed" and "the leg-engaging retainer is connected pivotably to the elongated rod, such that rotation about a horizontal rotation axis is allowed". According to the argument, the contradiction would be irresolvable so the skilled person would be unable to carry out the invention. The Board disagrees.
- 4.2.2 The Board notes that, whereas claim 1 defines stops on the guide chain that prevent rotation of the shackle assemblies about an essentially horizontal rotational axis, claims 7 and 8 define the freedoms of movement of particular connections (connection of the elongated rod via a connection member to the hanger in claim 7 and to the leg-engaging retainer in claim 8). In the Board's view, these aspects of the invention are independent. Put differently, the connections will retain their rotational freedoms, irrespective of

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whether the shackle assembly is constrained by a stop or not at a particular time. This may be because where the claim is directed at one part of a conveying assembly where movement is constrained there may be other parts where that is not the case.

- 4.2.3 This is confirmed by for example paragraph [0106] with figure 11. These parts of the disclosure immediately inform the skilled person that the guide chain and stops are only provided along a section of the main conveyor where horizontal rotation is not desirable. Along the remainder of the main conveyor it remains possible and desirable (see for example paragraphs [0045] and [0046]).
- 4.2.4 Thus, the Board considers that the skilled person would be able to carry out the invention defined in claims 7 and 8.
- 5. Interpretation of the claim term leg engaging retainer
- 5.1 This term plays an important role in defining the invention. The appellant-opponent has argued that it has no well-known meaning in the art and can include more than the parts of the shackle assembly that are directly in contact with the chicken's legs when in use. Therefore, so the appellant argued, the lower part of the elongate rod can be considered to be part of the leg engaging retainer. The Board disagrees.
- 5.1.1 In the Board's view, however uncommon the term leg engaging retainer might be, the term is descriptive: it defines the functions of engaging and retaining legs.

 In the context of a shackle assembly for transporting a poultry carcass, the skilled person will immediately understand the term to meaningfully define the assembly

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part that engages with and retains the conveyed chicken's legs, whether or not part of it might not be in direct contact with the legs. Therefore, the Board in this respect considers the term to convey a clear meaning.

5.1.2 The appellant-opponent's argument boils down to the boundary between the elongate rod and the leg engaging retainer being undefined in claim 1. The Board takes a different view.

The claim defines that each shackle assembly comprises three distinct components, namely a connection member, an elongated rod that extends vertically from the connection member and a leg-engaging retainer at the lower end of the rod. Thus, the rod has upper and lower ends, a connection member being at the upper end and a leg engaging retainer at the lower end. Whatever difficulty the skilled person might have in understanding the meaning of leg engaging retainer (though the Board sees none), the Board considers the term elongated rod to be unambiguous, nor has the contrary been argued (see for example Merriam-Webster on line dictionary, definition 1.b.1: a slender bar (as of wood or metal)). Thus, the skilled person will understand that at the lower of the elongated rod's two ends, the rod meets the leg engaging retainer.

In the Board's view, the description and drawings are consistent with this interpretation (see for example published patent specification, paragraphs [0102] and [0103] with figures 11 and 12): The leg-engaging retainer 216 is shown and described as having various essentially vertically extending frame bars that form leg-receiving openings 217. Thus it is a frame made of bars, not a single rod. As best seen in figure 12,

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these frame bars extend until they join together at the lower of the elongated rod 214's two ends.

- 5.1.3 To sum up, the Board considers that the claim defines the vertically extending elongated rod and leg-engaging retainer to be distinct parts and that the boundary between the two is at the lower of the elongated rod's two ends. Thus, the term "leg engaging retainer" is to be understood as an element that is separate from the rod to which it is connected at the lower end (of the rod) and which has the function of engaging and retaining the chicken's legs.
- 6. Main request, claim 1, novelty with respect to D3
- D3 discloses (see page 1, lines 58 to 73 and figures 1 and 2) a conveying assembly comprising an overhead conveyor 7 that uses shackle assemblies 9 for transporting poultry carcasses on a series of trolleys travelling on a track. Each trolley has a hanger (bifurcated yoke portion 3) and each shackle assembly has a connection member (see figure 2, pivoted connection at bottom of the yoke) to connect to the hanger.
- Moreover, D3 discloses an elongated rod (support member 2 / bar 6) extending essentially vertically from the connection member and a leg-engaging retainer at the lower end of the rod (see page 2, lines 53 to 60 and figure 1: rake 9 with its prongs 10a, 20b to engage and retain chicken legs). The assembly also comprises a guide chain (see page 3, lines 1 to 25 with figure 1 additional chain 18) that is horizontally below and parallel to the overhead conveyor and that operates synchronously with the drive chain. The guide chain prevents rotation of the shackle assemblies about an

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- essentially horizontal rotation axis because certain chain-links are coupled to the elongated rods 2/6.
- Bearing in mind that the Board considers the claim to define the boundary between the leg-engaging retainer and elongated rod to be the lower of the rod's two ends, D3's guide chain 18 does not abut the leg-engaging retainer 9, 10 (see figure 1). Rather, it only abuts the elongated rods 2/6. Therefore, D3 does not take away novelty of claim 1 (whether or not the chain-links that are coupled to the elongated rods constitute stops).
- 7. Main request, inventive step
- 7.1 Differences with respect to D1
- 7.1.1 D1 (see for example column 2, line 57 to column 3, line 12 with figure 1) discloses a conveying assembly using shackle assemblies for transporting poultry carcasses through a processing plant. A series of trolleys (shackle yokes 4) run on a track 2. D1 also explains (see column 3, lines 13 to 26), that each trolley has a hanger and connection member 12. An elongated rod 10 extends vertically from the connection member 12 and a leg-engaging retainer (poultry shackle 16) is disposed at the lower end of the rod.
- 7.1.2 The assembly also comprises a guide element (see column 3, lines 55 to 60 and column 4, lines 49 to 57 with figures 1 and 2 -guide rails 28). Each rail is horizontally below and parallel to the overhead conveyor and engages against the leg-engaging retainer to prevent its rotation about the vertical axis. The assembly of D1 further comprises a guide chain (see column 5, lines 45 to 60 with figures 1 and 2: sprocket

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- chain 82). The chain is arranged horizontally below and essentially parallel to the overhead conveyor and is operable synchronously with drive chain (see column 6, lines 7 to 19).
- 7.1.3 D1's guide chain 82 is provided with stops that take the form of downward pointing standards 116 with stop fingers 118 (see column 6, lines 43 to 63 with figures 1 and 6). These prevent the shackle assemblies from swinging to the rear as carcasses are lifted off the leg-engaging retainer by the ramps 60 (see column 5, lines 44 to 50 and column 6, lines 39 to 54), thus they prevent the rotation of the shackle assemblies about a horizontal axis.
- 7.1.4 Recalling that the claim defines the leg-engaging retainer separate from and connected at the lower of the elongated rod's two ends, the subject matter of claim 1 differs from D1 in that the stops abut against the leg-engaging retainer. In D1 (see figure 1 and column 6, lines 39 to 54 and column 3, lines 21 to 26), the stops 116, 118 abut against the elongated (drop) rod 10, above the sleeve joint that joins the rod to the leg engaging retainer. The conveyor system is thus novel over D1.
- 7.2 D1 combined with general knowledge
- 7.2.1 Considering the identified differing feature (stops abut the leg-engaging retainer), the Board notes that the patent does not explain any particular effect of a stop's point of abutment. Rather, it only explains (see published patent specification, paragraph [0080]) that the stops prevent rotation of the shackle assemblies about an essentially horizontal rotation axis. D1 likewise achieves this (see again column 6, lines 50 to

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54), with its stop fingers 118 that engage the vertical rods, so that this effect cannot serve to formulate the objective technical problem. Therefore it is appropriate to formulate a less ambitious objective technical problem.

It can be formulated as: How to modify the conveying assembly of D1 to provide an *alternative* arrangement for preventing rotation of the shackle assemblies about a horizontal axis.

7.2.2 This raises the question as to whether, in seeking such an alternative arrangement, it would be obvious for the skilled person to make D1's stops (fingers 118) abut against the leg-engaging retainer.

The opposition division considered that simply lowering the standard 116 with its stop fingers 118 (to impinge on a vertical extending frame bar of the leg engaging retainer) would not be obvious because it would involve completely redesigning the conveying assembly, going beyond the routine skills of the skilled person. The Board agrees.

The appellant-opponent has argued (see appeal grounds, points 43 and 44) that the modification required is merely to increase the length of the support standard 116 so that the fingers 118 engage with the shackle 16, which would be obvious.

The Board concurs with the respondent-proprietor that increasing the length of the standards 16 with their fingers 118 to extend beyond the top of the shackle 16 would result in a collision of these elements. D1 already teaches (see column 6, lines 63 to 72 with figure 1) that even interference between the relatively

widely spaced elongated (drop) rods and stop fingers 118 is potentially problematic and thus requires a specific design (fingers arranged to approach the drop rods at an acute angle, and arc shaped fingers). Extending the standards 116 below the top of the shackle would result in collision because, as can best be seen in figure 1, both the standards 116 and the stop fingers 118 are wider than any gaps within the frame of the leg-engaging retainer 16 (shackle) and wider than the gap between adjacent shackles. Moreover, (see figure 2), each standard 116 is arranged so that when the finger 118 fully abuts the rod 10, the standard is aligned in the same vertical plane as the upper horizontal bar of the shackle frame 16. Thus, the standard 116 could not merely be extended to reach some lower part of the shackle without colliding with this upper horizontal bar. In other words, avoiding any interference would require a more complex redesign than merely changing the dimensions of the finger stops and/ or standards.

Therefore, the Board agrees with the opposition division that the modifications to D1 needed to arrive at the claimed subject matter in this way would require more than the skilled person's routine skills and general knowledge.

7.2.3 The appellant-opponent has also argued that the skilled person would not need to extend the drop rods so far down that they impinged on a vertical bar of the shackles, rather, they could make a simpler modification by extending the standard 116 only so far down that the finger 118, whilst still abutting the rod 10, also abutted the shackle frame 16's upper horizontal bar, allowing friction between the finger

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and the horizontal bar to prevent rotation. The Board does not find this convincing.

Any friction which might occur between such a lowered finger 118 and the horizontal top of the shackle frame 16 would, at most, only impede rotation of the shackle assembly about a vertical axis, but not about a horizontal axis as claimed. Moreover, aligning the fingers exactly at the height of the top of the shackle (cf. D1, figure 2) as they approach the shackle would risk interference or collision between the two. Therefore, the skilled person would not make this modification to the D1 assembly in the expectation of solving the problem posed.

- 7.2.4 Therefore, the arguments of the appellant-opponent have not convinced the Board that the subject matter of claim 1 lacks inventive step starting from D1 combined with general knowledge.
- 7.3 D1 in combination with D3
- 7.3.1 As already explained (see above, section 7.1.4), the subject matter of claim 1 differs from D1 in that the stops abut against the leg engaging retainer, rather than the elongated rod. D3 likewise does not disclose this differing feature (see section 6 above), at most D3 discloses the guide chain 18 to abut the elongated rod.
- 7.3.2 In the absence of the differing feature being disclosed in either D1 or D3, however obvious the combination of D1 and D3 might be, it would not lead to the conveying assembly as claimed. Therefore, the Board agrees with the opposition division's finding (see impugned decision, grounds, point 5.2.2) that the subject matter

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of claim 1 involves an inventive step in the light of D1 with D3.

- 8. Admissibility of late submissions: D2 in combination with D1
- 8.1 This objection was not raised in opposition proceedings, therefore, it is late filed and its admittance subject to the Board's discretion under Article 114(2) EPC with Article 12(4) RPBA (2007). In exercising its discretion the Board considers, amongst other things, whether the late filing is justified by developments in proceedings and its prima facie relevance.
- 8.2 In the present case, the claim under consideration is as granted and documents D1 and D2 were available to the appellant-opponent from the start of the opposition proceedings. Therefore, there have been no developments in the proceedings which would justify admitting the objection for the first time in appeal.
- 8.3 Moreover, the Board is of the opinion that, *prima* facie, the combination of D2 with D1 is not relevant for inventive step.
 - D2 discloses (see column 3, lines 23 to 51 with figure 1) a conveying assembly for transporting poultry carcasses. The assembly comprises an overhead conveyor (C) carrying shackle assemblies. Each shackle assembly has a shackle rod (SR) an elongated rod in the claim's words and a leg-engaging retainer.

D2 does not disclose a guide chain. Rather, it discloses (see column 5, lines 5 to 35 with figures 1 and 2) an auxiliary shackle drive wheel 40. As best

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seen in figure 2, the wheel 40 is provided with stops in the form of tangs 41 that abut the elongated rods SR and thus prevent rotation of the shackle assemblies about an essentially horizontal rotation axis.

- 8.4 In the Board's view, if the skilled person were to combine D2 with D1, since both documents disclose stops that abut the elongated rods of shackle assemblies (cf. D1, figure 1, stops 118), their combination (however obvious) would not lead to stops abutting the legengaging retainer (shackle) as claimed. Therefore, prima facie, the appellant-opponent's objection is not relevant.
- 8.5 For these reasons the Board decided to exercise its discretion under Rule 12(4) RPBA 2007 by not admitting this objection into the proceedings.
- 9. From the above, the arguments presented by the appellant-opponent have not convinced the Board that the opposition division (see impugned decision, point II 6) erred in finding that none of the grounds of opposition prejudiced the maintenance of the patent as granted. Therefore, the respondent-proprietor's auxiliary requests need not be considered and the Board must dismiss the appeal.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



G. Magouliotis

A. de Vries

Decision electronically authenticated