BESCHWERDEKAMMERN PATENTAMTS

BOARDS OF APPEAL OF OFFICE

CHAMBRES DE RECOURS DES EUROPÄISCHEN THE EUROPEAN PATENT DE L'OFFICE EUROPÉEN DES BREVETS

Internal distribution code:

- (A) [] Publication in OJ
- (B) [] To Chairmen and Members
- (C) [] To Chairmen
- (D) [X] No distribution

Datasheet for the decision of 29 October 2021

Case Number: T 0278/18 - 3.2.04

Application Number: 11164014.0

Publication Number: 2404505

IPC: A22C21/00

Language of the proceedings: EN

Title of invention:

A method and device for slitting a chicken leg

Patent Proprietor:

Meyn Food Processing Technology B.V.

Opponents:

Nordischer Maschinenbau Rud. Baader GmbH + Co. KG Marel Stork Poultry Processing B.V.

Headword:

Relevant legal provisions:

EPC Art. 54, 123(2), 84

Keyword:

Novelty - main request (no)

Amendments - auxiliary requests, extension beyond the content of the application as filed (yes)

Claims - auxiliary requests, clarity (no)

Decisions cited:

T 0006/01

Catchword:



(Opponent 2)

Beschwerdekammern Boards of Appeal

Chambres de recours

European Patent Office Richard-Reitzner-Allee 8 85540 Haar GERMANY

Boards of Appeal of the

Tel. +49 (0)89 2399-0 Fax +49 (0)89 2399-4465

Case Number: T 0278/18 - 3.2.04

D E C I S I O N of Technical Board of Appeal 3.2.04 of 29 October 2021

Appellant: Meyn Food Processing Technology B.V.

(Patent Proprietor) Noordeinde 68

1511 AE Oostzaan (NL)

Representative: Van Breda, Jacobus

Octrooibureau Los & Stigter B.V.

Weteringschans 96 1017 XS Amsterdam (NL)

Respondent: Nordischer Maschinenbau (Opponent 1) Rud. Baader GmbH + Co. KG

Geniner Strasse 249 23560 Lübeck (DE)

Representative: Stork Bamberger Patentanwälte PartmbB

Meiendorfer Strasse 89 22145 Hamburg (DE)

Respondent: Marel Stork Poultry Processing B.V.

Handelstraat 3

5831 AV Boxmeer (NL)

Representative: Algemeen Octrooi- en Merkenbureau B.V.

P.O. Box 645

5600 AP Eindhoven (NL)

Decision under appeal: Decision of the Opposition Division of the

European Patent Office posted on 3 January 2018 revoking European patent No. 2404505 pursuant to

Article 101(3)(b) EPC.

Composition of the Board:

Chairman A. de Vries
Members: J. Wright

T. Bokor

- 1 - T 0278/18

Summary of Facts and Submissions

- I. The appeal was filed by the appellant (patent proprietor) against the opposition division's decision to revoke the patent in suit. During the opposition proceedings, the opponents opposed the patent for lack of novelty under Article 100(a) EPC.
- II. The opposition division decided that the subject matter of the claims as granted and according to the auxiliary requests then on file, was not novel.
- III. Oral proceedings were duly held before the Board on 29 October 2021.
- IV. The appellant (patent proprietor) requested that the decision under appeal be set aside and maintenance of the patent as granted, as main request, alternatively in an amended form on the basis of one of the auxiliary requests 1 to 4 filed with the grounds of appeal dated 8 March 2018.

The respondents (opponents 1 and 2) requested that the appeal be dismissed.

- V. The independent claims (1 and 4) of the main request read as follows:
 - "1. A method for slitting an animal's leg (4, 5) which is suspended at its ankle joints (6) from a carrier (1) that forms part of a train of carriers that are movable in a processing line, which leg (4, 5) comprises a drum (4) and a thigh (5) that are connected to each other at a knee joint (7), which method includes a positioning step for placing the leg (4, 5) in a suitable position

for cutting the leg (4, 5), and a stabbing step in which a knife (11) is brought into engagement with the leg (4, 5), which stabbing step is followed by a slitting step in which the knife (11) is moved along the leg (4, 5) so as to provide a slit (12) in the longitudinal direction of the leg (4, 5) in order to enable a subsequent deboning step of the leg (4, 5), wherein in the positioning step a first pressing organ (9) engages the leg (4, 5) so as to press the leg (4, 6)5) against a movable supporting surface (8) for the leg (4, 5) that is positioned opposite to the pressing organ (9), characterized in that the animal's leg is a chicken leg and the first pressing organ (9) engages the leg (4, 5) in the vicinity of the knee joint (7), and that a second pressing organ (10) engages the leg (4, 5) from the side so as to push the leg (4, 5) into a substantially straight orientation of the drum (4) and the thigh (5) with respect to each other".

"4. A processing device (2, 3) for slitting a chicken leg (4, 5) having a drum (4) and a thigh (5) that are connected to each other at a knee joint (7) and which is suspended at the leg's ankle joints (6) from a carrier (1) that forms part of a train of carriers that are movable in a processing line passing said processing device, which device (2, 3) has at least one positioning organ (8, 9, 10) for placing the leg (4, 5)in a suitable position for cutting the leg (4, 5), and a knife (11) which is arranged to be brought into engagement with the leg (4, 5), and which knife (11) is movable along the leg (4, 5) so as to provide a slit (12) in the longitudinal direction of the leg (4, 5) in order to enable a subsequent deboning step of the leg (4, 5), wherein the at least one positioning organ (8, 9, 10) comprises a movable supporting surface (8) for the leg (4, 5) and a first pressing organ (9) which is

- 3 - T 0278/18

arranged to engage the leg (4, 5) so as to press the leg (4, 5) against said movable supporting surface (8), characterized in that the first pressing organ (9) is arranged to engage the leg (4, 5) in the vicinity of the knee joint (7), and further comprises a second pressing organ (10) which is arranged to engage the leg (4, 5) from the side so as to push the leg (4, 5) into a substantially straight orientation of the drum (4) and the thigh (5) with respect to each other".

Claim 1 of auxiliary request 1 reads as for the main request except that after the wording "characterized in that the animal's leg is a chicken leg and the first pressing organ (9) engages the leg (4, 5) in the vicinity of the knee joint (7) and presses the leg (4, 5) against the supporting surface (8)" the following wording is added:

"and presses the leg (4, 5) against the supporting surface (8) so as to move the supporting surface (8) slightly backwards and move the leg (4, 5) into a slightly twisted position"

Claim 4 of auxiliary request 1 reads as claim 4 of the main request except that after the wording:

"characterized in that the first pressing organ (9) is arranged to engage the leg (4, 5) in the vicinity of the knee joint (7)", the following wording is added:

"and press the leg (4, 5) against the supporting surface (8) so as to move the supporting surface (8) slightly backwards and move the leg (4, 5) into a slightly twisted position"

Claim 1 of auxiliary request 2 reads as for auxiliary request 1 but adds the following feature to the end of the claim: "and that during the slitting step in which the knife (11) is moved along the leg (4, 5) for

- 4 - T 0278/18

providing it with a slit (12), the first pressing organ (9) and the second pressing organ (10) maintain the leg (4, 5) into its substantially straight orientation of the drum (4) and the thigh (5) with respect to each other".

Independent claim 3 of auxiliary request 2 reads as claim 4 of auxiliary request 1 but adds the following feature to the end of the claim:

"and that the first pressing organ (9) and the second pressing organ (10) are arranged to maintain the leg (4, 5) into a substantially straight orientation of the drum (4) and the thigh (5) with respect to each other when the knife (11) is moved along a bone of the leg (4, 5) for providing said leg with a slit (12)".

Claim 1 of auxiliary request 3 reads as for auxiliary request 2 except that after the wording "a second pressing organ (10) engages the leg (4, 5) from the side so as to push the leg (4, 5) into a substantially straight orientation of the drum (4) and the thigh (5) with respect to each other," the following wording is inserted:

"wherein simultaneously with the engagement of the poultry leg (4, 5) by the first pressing organ (9), the knife (11) stabs into the flesh of the leg (4, 5) at a position that lies adjacent to the legs' bone"

Independent claim 2 of auxiliary request 3 reads as for claim 3 of auxiliary request 2 except that after the wording "and further comprises a second pressing organ (10) which is arranged to engage the leg (4, 5) from the side so as to push the leg (4, 5) into a substantially straight orientation of the drum (4) and the thigh (5) with respect to each other," the following wording is inserted:

- 5 - T 0278/18

"that the knife (11) is arranged to stab into the flesh of the leg (4, 5) simultaneously with the engagement of the poultry leg (4, 5) by the first pressing organ (9) and at a position that lies adjacent to the legs' bone,"

Claims 1 and 2 of auxiliary request 4 read as for claims 1 and 2 of auxiliary request 3 except that after the wording "to push the leg (4, 5) into a substantially straight orientation of the drum (4) and the thigh (5) with respect to each other" in the respective claims, the following wording is inserted: "to provide an accurate slit by moving the knife along the bone of the leg from its ankle joint up to the thigh bone at the far side of the knee joint".

- VI. In the present decision, reference is made to the following documents:
 - A2: JP2001149001, and its English translation filed with letter of 8 January 2016.
- VII. The appellant-proprietor argued that:
 - Document A2 did not take away novelty of the main request because A2 did not disclose the feature of a second pressing organ that pushed the leg into a straight orientation.
 - The subject matter of the independent claims of the auxiliary requests did not extend beyond the application as filed and was clear.
- VIII. The respondents-opponents argued that:
 - A2 disclosed all the features of the independent claims of the main request, including a second pressing organ as claimed.

- 6 - T 0278/18

 The independent claims of the auxiliary requests added subject matter and lacked clarity.

Reasons for the Decision

- 1. The appeal is admissible.
- 2. Background

The invention (see published patent specification, paragraph [0001]) relates to slitting a chicken leg. The leg comprises a drum[stick] and a thigh connected at a knee joint and is suspended at its ankle joint from a processing line's carrier. The leg must be correctly positioned before it is cut. In this positioning step (see published patent specification, paragraph [0008] and all versions of the independent claims) a first pressing organ engages the leg in the vicinity of the knee joint and presses the leg against a movable supporting surface. A second pressing organ engages the leg from the side to push the drum and the thigh into a substantially straight orientation with respect to each other.

- 3. Interpretation
- The feature of engagement of the second pressing organ to push the leg into a substantially straight orientation plays an important role in the invention and its interpretation has been disputed. The term substantially straight must first be considered. The appellant-proprietor says (see appeal grounds, points 11 and 12) that it means completely straight. The respondents-opponents interpret it more broadly, so that the drum and thigh do not have to be completely aligned. The Board agrees with the respondents.

- 7 - T 0278/18

- 3.1.1 According to established jurisprudence, claim terms are to be given their normal meaning in the relevant art, unless the description gives them a special meaning (see CLBA II.A.6.3.3).
- 3.1.2 The normal meaning of substantially is to a great extent (cf. Oxford English Dictionary on line OED, meaning 3). In the anatomical context of a chicken's leg, with its drum and thigh bones hinged at a knee joint permitting it to naturally bend in one plane between small acute angles and 180°, the disputed term implies a range of angles with an upper limit of 180° and an undefined lower limit, that in the Board's view, at most can be said to approach 180°.
- 3.1.3 The description does not give the term *substantially* straight a different meaning. The term is used in the general part (see paragraphs [0008] and [0010]) just as it is used in the independent claims, without further interpretation. It is used again in the detailed embodiments (see paragraphs [0017] and [0018] with figures 2 and 3) again without any interpretation. However, these paragraphs do explain that, whilst an initial operation on the leg is shown in figure 2, the leg's eventual position after it has been pushed into the substantially straight orientation is only shown in figure 3. There, far from the leg being shown as completely straight, it still appears in the figure to be considerably bent at the knee. The Board sees no reason to disregard figure 3 as not reflecting what is claimed because it might be an inaccurate anomaly as the appellant-proprietor argued. Whatever leg orientations might be shown in the other drawings, the description confirms (paragraph [0017]) that only figure 3 shows the leg's substantially straightened orientation prior to cutting, so it is not implicit

-8- T 0278/18

that it was intended to show the same leg orientation as the other drawings. Nor does the Board see any reason to consider that figure 3 might be so inaccurate that it shows something which is not in conformity with the claims as the appellant-proprietor has asserted.

- 3.1.4 Therefore, the description and drawings neither give a special definition of the claim term substantially straight, nor support the appellant-proprietor's view that it should mean completely straight. Therefore, the Board interprets the term as defining the leg to be straight to a great extent (for example as shown in figure 3 of the patent) with an upper limit of 180°.
- 3.2 A further question of interpretation concerns whether it is only the second pressing organ that by engaging the leg pushes it into a substantially straight orientation. If read in isolation, the feature might appear to define that the leg's orientation was solely the result of the second pressing organ's engagement. However, the skilled person does not read it in this way. Rather, they read it in its claim context, where the leg is also being:
 - pulled down by gravity from the ankle,
 - engaged at the knee by the first pressing organ and
 - pressed against the movable support surface.

Forces act on the leg at all these points. The leg's orientation is the net result of all these forces, not just the one exerted by the second pressing organ. Therefore, the Board interprets the feature to mean that the second pressing organ contributes to the leg's substantially straight orientation rather than being the sole cause of it.

- 9 - T 0278/18

- 4. Main request, claim 1, novelty with respect to A2
- 4.1 A2 (see for example claim 1 and paragraph [0032] with figures 2A and 4) relates to a method of slitting a chicken's leg that is suspended at its ankle joint from a hanger, which is a carrier. In A2's context of an automated deboning process on continuous conveyors, it is implicit that the carrier 50 is one of a train of carriers on a processing line.
- The leg comprises a drum[stick] and a thigh connected to each other at a knee joint (see figure 4). Before the leg is deboned (see page 1, claim 1), the following steps are performed on the leg:
 - positioning it suitably for cutting (A2 calls this supporting and controlling a posture),
 - stabbing (sticking an incising knife to the work)
 - finally slitting by moving the knife along the leg to provide a slit in the longitudinal direction of the leg (cutting down the work with the stuck knife along a bone portion).
- In the positioning step, the leg is at the cutting station 52 and a cutting board 15 forms a movable support surface (see page 30, paragraph [0034] the board 15 is retractable). Figures 2A and 2B show that a [first] pressing organ 21 is opposite the movable support surface 15 so that the meat is sandwiched between them. The first pressing organ 21 contacts most of the leg's middle part, thus it engages the leg in the vicinity of the knee joint. This results in the leg being pressed between the first pressing organ 21 and the movable support surface 15 (see page 31, end of paragraph [0033] with figures 2B).

- 10 - T 0278/18

- 4.4 Therefore, novelty hinges on the question: Does A2 disclose the last (second pressing organ) feature? The Board answers yes.
- As already explained, the last claim feature is to be interpreted as defining a second pressing organ that contributes to the leg's being oriented in a range of angles approaching but not exceeding 180°. A2 discloses (see paragraph [0037] first sentence, and figures 2A, 2B, 4A, 4B) a second pressing organ 18 that rotates upwardly to apply pressure to a lower side of the thigh meat. Irrespective of the pressure being described as acting in an upper right direction, it unequivocally presses the side of the meat and therefore engages the leg from the side. As shown in figure 4A (see paragraph [0042]), the leg bones are parallel to the vertical cutting board 15 seen from the side at which the pressing organ 18 operates.
- 4.4.2 A2 (see paragraphs [0036], [0039] and figures 2B, 4A and 4B) also discloses that the ankle, from which the chicken leg is suspended, is regulated in the left and right directions by a vertically arranged reference block 16 on the cutting board 15 and an upper pusher 16a. Because the ankle (as shown in figure 4B) is sandwiched and clamped between these two, the bones between the knee and the ankle (drumstick) must also be vertically orientated.
- 4.4.3 The knife 20 likewise moves vertically. The upper and lower pushers 16a, 18 are said to allow the incising knife 20 to fall vertically to incise the thigh meat along an inner side of a curved bone portion (see paragraphs [0037] and paragraph [0046], middle). In more detail (see paragraph [0045] with figure 4B), the knife makes an incision (knife is stuck) then moves through the regions A (drumstick), D (at the knee) and

B (thigh). The pressure applied by the upper and lower pushers 16a and 18 varies as the knife cuts. In this way the vertically falling knife follows the bones without cutting into them or the knee joint.

4.4.4 The Board considers that the thigh bone must, to all intents and purposes, at some stage be vertically orientated like the drumstick. If this were not so, a vertically moving knife would not be able to cut from the ankle to the top of the thigh whilst following the bones. Therefore, the orientation of the drum and the thigh implicitly, at the latest when the knife has fallen to region D, approaches a straight vertical line. In this regard, the claim does not specify any duration. Consequently, the drum and the thigh have a substantially straight orientation.

The appellant-proprietor has argued that this is not so because it is contradicted by figure 4B. Whilst it is true that the leg shown there is not completely straight, it does not need to be to anticipate the claim feature. Rather it only needs to be straight to a great extent. In the Board's view, figure 4B shows such an extent of straightness because the drum and thigh bones are depicted approaching a straight line. Certainly the leg appears to be no less straight than the one shown in figure 3 of the patent, which must be substantially straight in the sense of claim 1. Additionally, figure 4B shows the knife in region A, where the (upper) bone 12b is already vertically aligned. For the knife to continue to travel unimpeded along its vertical trajectory past the joint region D (where the pressure of pushers 16A and 18 is temporarily released, paragraph 0045) lower bone 12d will have to align - mainly under the action of pusher 18 - to the vertical path of the knife. As stated, then - 12 - T 0278/18

at the latest the drumstick and thigh will be straightened or straightened even more than shown.

- Moreover, the Board considers that this substantially straight orientation of the drum and thigh (A2, figures 4A and 4B) can but be achieved by the contributions of all the elements that exert forces on the leg, including the lower pusher 18, which at least at some stage must exert a straightening force. Therefore, within the context of A2's pushing arrangement, the lower pusher 18 engages the leg (from the side) to push the leg into a substantially straight orientation as claimed, whether or not it would straighten the leg if it acted alone.
- 4.6 The Board concludes that A2 discloses all the features of claim 1, which therefore lacks novelty.
- 4.7 Independent device claim 4 has features that correspond to those of claim 1. Therefore, the above conclusion (subject matter not new with respect to A2) also applies to this claim.
- 5. Auxiliary requests 1 to 4
- 5.1 Claim 1 of all the auxiliary requests adds to the main request the feature:

 the first pressing organ [...] presses the leg against the supporting surface so as to move the supporting surface slightly backwards and move the leg into a slightly twisted position. The independent device claim of these requests contains a corresponding feature.
- 5.2 Claim 1 of all auxiliary requests, added subject matter

5.2.1 The words "so as to" in the added feature stipulate that the first pressing organ pressing on the leg causes the supporting surface to move backwards. In the Board's view, no such causality is originally disclosed. The appellant-proprietor has argued that the feature is taken from the detailed description of figure 2 in the application as filed (see published application, paragraph [0018]) and the causality stems from the order of introduction of the ideas of the first pressing organ operating (first sentence) and the support surface moving backwards (second sentence). The Board disagrees.

The paragraph has only two sentences. The first explains an initial operation, in which the first pressing organ presses the leg against the support surface. Nothing is said here about any effect this pressing might have. The second sentence opens with the feature: Due to the fact that this supporting surface can slightly move backwards, the leg is moved into a suitable and slightly twisted position from which it can reliably be moved into its eventual position by the operation of the second pressing organ [...].

This second sentence uses the passive voice to focus on the fact that the support surface can slightly move backwards, without naming any cause for such a movement. Nor is there any linguistic link between the first pressing organ's engagement and the support surface's backward movement elsewhere in the paragraph, let alone might such a link be implied merely by the sentence order. Therefore, the Board sees no original disclosure of the action of the first pressing organ pressing on the leg causing the supporting surface to move backwards as the amended claim requires.

- 14 - T 0278/18

5.2.2 Intermediate generalisation

According to established jurisprudence (see CLBA II.E. 1.9), it is normally not allowable to amend a claim by extracting isolated features from an originally disclosed specific combination of features, unless there is no functional or structural relationship among the features of the specific combination.

In the present case, the feature of the first pressing organ [...] of the supporting surface moving backwards causing the leg to twist is said to be based on paragraph [0018] of the application as filed. There, this twisted state is presented as a precursor state from which the leg is straightened to its eventual [final] state. The supporting surface moving backwards and the engagement of the second pressing organ are functionally related in that they occur as a sequence in time that together change the state of the leg (from twisted to straight). This sequential relationship has not been claimed. Rather, the feature of the second pressing organ engaging the leg is claimed as being merely additional to the first pressing organ engaging the leg (with the word and). Therefore, the added feature represents an unallowable intermediate generalisation.

5.3 The independent device claim of these respective requests adds subject matter for the same reasons as apply to claim 1.

- 15 - T 0278/18

5.4 Clarity

- 5.4.1 Article 84 EPC requires that claims are clear.

 According to established jurisprudence (see CLBA II.A.3 and for example T 0006/01, reasons 14) a claim is unclear if the exact scope of protection cannot be learnt from the claim. This requirement is necessary to distinguish the claimed subject matter from the prior art, as well as for a competitor to know whether they are working inside or outside the claim's scope of protection.
- 5.4.2 In the Board's view the qualifier *slightly* in the claim features *slightly backwards* and *slightly twisted* is vague. This means that the exact scope of protection cannot be derived from the claim. Therefore, claim 1 of the auxiliary requests is unclear, Article 84 EPC. The same applies to the independent device claims of these requests.
- 5.5 Without prejudice to the question of admissibility of these request, they all fail because they add subject matter and lack clarity (Articles 123(2) and 84 EPC).
- 6. Since all the requests fail, 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