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# Datasheet for the decision of 10 March 2025

**Case Number:** T 0297/23 - 3.2.04

**Application Number:** 16795357.9

**Publication Number:** 3376872

**IPC:** A21B1/42, A21B1/48, F27B9/14, A21B1/36, F27B9/30, F27B9/40, A23L5/10

**Language of the proceedings:** EN

**Title of invention:**
OVEN WITH IMPROVED DRAG

**Patent Proprietor:**
GEA Food Solutions Bakel B.V.

**Opponent:**
Marel Further Processing B.V.

**Headword:**

**Relevant legal provisions:**
EPC Art. 100(a), 100(b)

**Keyword:**
Inventive step - (yes)
Sufficiency of disclosure - (yes)
Industrial application - (yes)
Appeal decision - appeal allowable (no)

**Decisions cited:**

**Catchword:**

Europäisches Patentamt
European Patent Office
Office européen des brevets

**Beschwerdekammern**

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**Case Number: T 0297/23 - 3.2.04**

# D E C I S I O N
# of Technical Board of Appeal 3.2.04
# of 10 March 2025

| | |
|---|---|
| **Appellant:** (Opponent) | Marel Further Processing B.V.<br>Handelstraat 3<br>5831 AV Boxmeer (NL) |
| **Representative:** | Wolterink, Isabelle<br>Exter Polak & Charlouis B.V. (EP&C)<br>P.O. Box 3241<br>2280 GE Rijswijk (NL) |
| **Respondent:** (Patent Proprietor) | GEA Food Solutions Bakel B.V.<br>Beekakker 11<br>5761 EN Bakel (NL) |
| **Representative:** | Kutzenberger Wolff & Partner<br>Waidmarkt 11<br>50676 Köln (DE) |
| **Decision under appeal:** | **Decision of the Opposition Division of the European Patent Office posted on 22 December 2022 rejecting the opposition filed against European patent No. 3376872 pursuant to Article 101(2) EPC.** |

**Composition of the Board:**

| | |
|---|---|
| **Chairman** | A. Pieracci |
| **Members:** | J. Wright |
| | M. Millet |

## Summary of Facts and Submissions

I. 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. The opposition division decided:
- that the subject-matter of the claims as granted was novel and involved an inventive step and were susceptible of industrial application, and
- that the patent disclosed the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art.

III. In a communication of 4 October 2024 in preparation for oral proceedings, the Board set out its preliminary opinion on the case. With a letter of 5 March 2025, the appellant-opponent announced its intention not to attend the oral proceedings then scheduled for 27 March 2025 and requested that the Board take a decision based on the written documents on file. The Board cancelled the scheduled oral proceedings and decided the case in written proceedings.

IV. The appellant-opponent requests that the decision under appeal be set aside and that the patent be revoked.

The respondent (patent proprietor) requests that the appeal be dismissed.

V. Claims 1 and 7 of the main request (as granted) read as follows, with feature references used by the parties and the opposition division added to claim 1 by the Board in square brackets:

[1.1] "1. Method for operating an oven (1) comprising:

[1.2] - a first and a second chamber (13, 14) in which a heated fluid cooks a product, respectively,

[1.3] - conveyor means (4) for transporting products from an inlet (15) through the chambers (13, 14) to the outlet (16),

[1.3.1] wherein preferably the conveyor means are at least partially arranged in a helical path (8),

[1.4] - separation means (17) to separate the first and second chamber (13, 14),

[1.4.1] wherein the conveyor means (4) pass through the separation means,

[1.5] wherein a pressure difference (P1-P2) is established or reduced between the fluid in the first and the fluid in the second chamber (13, 14)

[1.5.1] preferably in the vicinity of the separation means (17),

characterized in, that

[1.6] a dew-point of the fluid in the respective chamber is adjusted by controlling the pressure difference (P1 - P2) by adjusting the recirculation rate in the chambers (13, 14), and

[1.7] that the dew-point of the chamber with the higher recirculation rate is lower and that the dew-point of the chamber with the lower recirculation rate is higher, and

[1.8] that the chamber (14) furthest downstream, relative to the product flow direction, has the highest recirculation rate".

"7. Method according to one of the preceding claims characterized in that the drag (19) is in counterflow to the transport direction (20) of the product".

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

D2: US 2011/0084056 A1
D4: WO 2008/008305 A2
D5: US 2005/0092312 A1

VII. The appellant-opponent objected (see appeal grounds, pages 2 to 5) that the subject matter of granted claim 1 lacked inventive step in view of D2. It also objected (see appeal grounds, page 6) that claim 7 lacked industrial application - Article 100(a) in view of Article 52(1) and 57 EPC. In a letter of 28 September 2023 (pages 1 and 2), the appellant-opponent raised an objection under Article 83 EPC. The relevant detailed arguments of the parties are apparent from the reasons for the decision presented below.

## Reasons for the Decision

1. The appeal is admissible.

2. Background

The invention relates to a method for operating an oven that comprises two chambers, see granted claim 1.

3. In its communication, the Board considered the objections presented by the appellant-opponent and the respondent-proprietor's rebuttal.

3.1 With regard to the appellant-opponent's objection that claim 1 lacked inventive step in view of D2, the Board wrote the following in its communication (see section 3):

"3. Main request, claim 1, inventive step with respect to D2

3.1 D2 (see abstract and figure 1) discloses an oven with first and second chambers, separated by a separation means and having a conveyor means for transporting products from an inlet to an outlet and passing through the chambers and the separation means. Thus, D2 appears to disclose all features 1.1 to 1.5, including their sub-features. Nor has the contrary been argued. The opposition division considered that D2 did not disclose features 1.6, 1.7 and 1.8 (cf. impugned decision section 2.4). Although it is common ground that D2 does not disclose features 1.7 and 1.8, the appellant-opponent argues that D2 additionally discloses feature 1.6. This is disputed by the

respondent-proprietor (see opponent's appeal grounds, pages 2 to 5, and proprietor's reply, pages 2 to 4).

3.2 In the Board's view, the opposition division were correct in finding that D2 does not disclose feature 1.6. Claim 1 is directed to a method for operating an oven. According to feature 1.6, this operation involves adjusting the dew point in a respective chamber. Feature 1.6 also defines that this is done by controlling the pressure difference [between chambers] by adjusting the recirculation rate in the chambers.

3.3 The Board agrees with the analysis of the appellant-opponent (see its appeal ground, figure at the top of page 3) in so far as a pressure difference between the chambers will lead to a permanent flow, or drag, between the chambers, and this can be adjusted by adjusting the recirculation rate in the chambers. The appellant-opponent sees this feature as being disclosed in D2, paragraph [0024], in particular it refers to the end of this paragraph:

*If, for example the circulation speed of the fluid in one chamber is increased to improve, for example, the heat-transfer, the pressure increases in this chamber, which, according to the state of the art results in an increased leakage. According to the present invention, however, the leakage between the chambers can be reduced and/or controlled to a desired level by adjusting the fluid-flow that that reduces or controls this leakage*.

3.4 The appellant-opponent goes on to argue (see its appeal grounds, page 4) that, in D2, there is a steady state pressure difference [between chambers] *leading to a gas drag between the chambers, influencing the dew*

*point [...].* This may be so. However, the Board disagrees with the conclusion the appellant draws from this, namely that this is *according to the claimed method*.

3.5 The claimed method explicitly says that the dew point of the fluid in a respective chamber is adjusted. According to the Oxford English dictionary online (OED) 2.a to adjust means: *To arrange, alter, or modify (a thing) in relation to something else so as to meet a standard, suit a purpose, or achieve a desired result*.

Giving the word *adjust, and its cognate adjusted*, their usual meanings, the claim step: *a dew point of the fluid in the respective chamber is adjusted* thus requires operating the oven to achieve a certain target dew point of fluid in a chamber. Feature 1.6 defines the parameters used to do so (controlling pressure difference by adjusting recirculation). This means that, in order for D2 to disclose feature 1.6 it is not sufficient that D2 discloses that pressure difference and recirculating rates are operating parameters for a double chamber oven, however these may influence the dew point and however stable such influences might be. Rather, D2 would need to disclose the steering of these parameters to achieve a target dew point. This is not the case. In D2 (see again paragraph [0024]) it is disclosed to increase [re]circulation speed of fluid in the chamber to improve heat transfer and to adjust fluid flow to control leakage between the chambers to a desired level, but not to achieve a certain dew point of the fluid. Indeed, D2 makes no explicit mention of dew point, let alone defines that it should be adjusted. Therefore, the Board is not convinced that D2 discloses feature 1.6.

The appellant-opponent's inventive step objection against claim 1 relies on D2 disclosing feature 1.6. Since, in the Board's view, D2 does not do so, the objection is moot. If the Board were to reach a different conclusion, the obviousness of modifying D2's method to achieve features 1.7 and 1.8 may need to be discussed. In the opposition proceedings, the combination of D2 with the skilled person's general knowledge was at issue (see the undisputed minutes section 5 and the impugned decision, section 2.5). Now in appeal, the appellant-opponent refers, not only to the skilled person's general knowledge, but also to patent documents D4 and D5 in this regard (see its appeal grounds, last paragraph on page 5). These latter objections appear to be an amendment to the appellant-opponent's case, which the appellant has neither identified as such, nor attempted to justify. The admittance of these objections lies at the discretion of the Board, Article 12(4)RPBA. In the Board's view, these could and indeed should have been timely raised in the opposition proceedings. Therefore, it intends not to admit them into the appeal proceedings, Article 12(6) RPBA".

3.1.1 In the absence of any substantive comment on this aspect of the communication, and after having reconsidered all the factual and legal aspects of the case, the Board confirms its preliminary opinion that D2 does not disclose feature 1.6. Therefore, its inventive step objection starting from D2 is moot. The further question as to whether it would be obvious to modify D2 to arrive at features 1.7 and 1.8, can therefore be left undecided.

3.2 Regarding the appellant-opponent's objection that feature 1.6 of claim 1 was insufficiently disclosed, the Board wrote the following in its communication (see section 4):

"4. Main request, claim 1, sufficiency of disclosure, feature 1.6

4.1 Admissibility

The matter of sufficiency of disclosure of claim I was considered in section 2.3 of the impugned decision. The opposition division found the opposition ground under Article 100(b) EPC not to prejudice the maintenance of the patent as granted. This was not contested by the appellant-opponent in its appeal grounds, but was first raised in a letter of 28 September 2023 and was said to be a response to points raised by the respondent-proprietor. Admittance of the objection may need to be discussed, Article 12(2) and 13(1) RPBA.

Without prejudice to the question of its admittance, the Board does not find the objection convincing. In its letter of 28 September 2023, the appellant-opponent worded its insufficiency of disclosure objection as follows:

*Following the appellant-proprietors arguments, there is no relationship between recirculation rate and pressure difference. In view hereof, it is not possible for the skilled person to unambiguously understand that only adjustment of the recirculation rate between the chambers is required to set a stable pressure difference. Hence, claim 1, in particular feature F1. 6 thereof, violates art. 83 EPC.*

However the respondent-proprietor argued in its reply to the appeal, the appellant's objection is based on the premise that there is *no relationship between recirculation rate and pressure difference* [between chambers]. The Board does not find this convincing.

As explained in the patent, paragraph [0015], recirculation means removes fluid from the chamber and blows it back in and this influences the pressure in the chamber. The Board sees no reason as to why this might not be true. Therefore, the statement in the patent, paragraph [0033] a pressure difference [between chambers] is achieved by a difference in the recirculation rate appears likewise to be true. Therefore, the Board considers the premise *(recirculation rate and pressure difference are unrelated)*, on which the appellant based its insufficiency of disclosure objection, to be incorrect. Consequently, the objection is moot".

3.2.1 In the absence of any substantive comment on this aspect of the communication from the parties and after having reconsidered all the factual and legal aspects of the case, the Board confirms that the appellant-opponent's insufficiency of disclosure objection is moot.

3.3 In respect of the appellant-opponent's objection that claim 7 as granted was not industrially applicable, the Board wrote the following in its communication (see section 5):

"5. Claim 7, industrial application

Article 57 EPC states that: *An invention shall be considered as susceptible of industrial application if it can be made or used in any kind of industry, including agriculture*.

The opposition division found claim 7 to be susceptible of industrial application (see the impugned decision, point 2.6.3).

The appellant-opponent (see its appeal grounds, page 6) has not provided any reason as to why a method according to claim 7 (drag in counter-flow to product transportation flow) could not be made or used in industry. Rather, the appellant-opponent merely sees a contradiction between the opposition division's assessment of Article 83 EPC objections compared to its assessment of Article 57 EPC. The Board does not see how any such contradiction (whether or not there might be one) would demonstrate the method of claim 7 to have no industrial applicability. Rather, at most, the argument would appear to go in the direction of finding the subject matter of the claim contradictory. Whether or not this might be convincing, that would be a matter of clarity and not industrial applicability.

For completeness, the Board notes that the appellant-opponent bases its allegation of a contradiction in the decision by citing section 2.6.3 - top of page 16 (Consequently it is not possible to derive from the basic law of thermodynamics and fluid-dynamics that the oven chamber with a higher recirculation rate has necessarily a lower pressure (as it would be expected in a closed ideal thermodynamic system)).

In the decision, this text is preceded by an explanation (decision, 2.6.2 and the first paragraph of 2.6.3) that the claimed method is not applied in a closed and ideal system where Bernoulli's principle would apply. Read contextually, the appellant-opponent's citation does not express that the opposition division considered that the skilled person could not derive the pressure [in an oven chamber] from a recirculation rate as the appellant-opponent postulates, but rather no more than that the chamber pressure could not be derived by applying Bernoulli's principle.

For all these reasons, the appellant-opponent's objection against claim 7 is moot."

3.3.1 In the absence of any substantive comment on this aspect of the communication from the parties and after having reconsidered all the factual and legal aspects of the case, the Board confirms its opinion expressed in its communication that the appellant-opponent's objection that the invention defined in granted claim 7 is not susceptible to industrial application is moot.

4. In the light of the above, the arguments brought by the appellant-opponent in appeal have not demonstrated to the Board that the opposition division erred in deciding that the grounds of oppositions under Article 100(a) and (b) EPC did not prejudice maintenance of the opposed patent as granted. Nor, by the same token, that the opposition was wrong to reject the appellant's opposition under the provisions of Article 101(2) EPC.

## Order

## For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

G. Magouliotis A. Pieracci

Decision electronically authenticated