

**Internal distribution code:**

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

**Datasheet for the decision  
of 27 October 2023**

**Case Number:** T 1195/22 - 3.2.04

**Application Number:** 13186178.3

**Publication Number:** 2679097

**IPC:** A21B1/42, A21B1/48

**Language of the proceedings:** EN

**Title of invention:**

Process to control the airflow and air-leakages between two  
baking chambers

**Patent Proprietor:**

GEA Food Solutions Bakel B.V.

**Opponent:**

Marel Further Processing B.V.

**Headword:**

**Relevant legal provisions:**

EPC Art. 100(b), 111(1)

RPBA 2020 Art. 11

**Keyword:**

Grounds for opposition - insufficiency of disclosure (no)  
Remittal - (yes)

**Decisions cited:**

T 0032/84

**Catchword:**



**Beschwerdekammern**  
**Boards of Appeal**  
**Chambres de recours**

Boards of Appeal of the  
European Patent Office  
Richard-Reitzner-Allee 8  
85540 Haar  
GERMANY  
Tel. +49 (0)89 2399-0  
Fax +49 (0)89 2399-4465

Case Number: T 1195/22 - 3.2.04

**D E C I S I O N**  
**of Technical Board of Appeal 3.2.04**  
**of 27 October 2023**

**Appellant:** GEA Food Solutions Bakel B.V.  
(Patent Proprietor) Beekakker 11  
5761 EN Bakel (NL)

**Representative:** Wolff, Felix  
Kutzenberger Wolff & Partner  
Waidmarkt 11  
50676 Köln (DE)

**Respondent:** Marel Further Processing B.V.  
(Opponent) Handelstraat 3  
5831 AV Boxmeer (NL)

**Representative:** Brookhuis, Hendrik Jan Arnold  
Exter Polak & Charlouis B.V. (EP&C)  
P.O. Box 3241  
2280 GE Rijswijk (NL)

**Decision under appeal:** **Decision of the Opposition Division of the  
European Patent Office posted on 4 April 2022  
revoking European patent No. 2679097 pursuant to  
Article 101(3) (b) EPC.**

**Composition of the Board:**

**Chairman** A. de Vries  
**Members:** J. Wright  
C. Almberg

## **Summary of Facts and Submissions**

- I. The appeal was filed by the appellant (patent proprietor) against the decision of the opposition division to revoke the patent in suit.
- II. The opposition division decided that the patent did not disclose the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art, Articles 100(b) and 83 EPC.
- III. In preparation for oral proceedings before the Board, which duly took place on 27 October 2023, the Board issued a communication setting out its provisional opinion on the relevant matters.
- IV. The appellant-proprietor requested that the decision under appeal be set aside and that the case be remitted to the opposition division for further prosecution based on the patent
- as granted (main request) or, in the alternative,
  - as amended based on one of the five auxiliary requests on which the appealed decision was based.

The respondent-opponent requested that the appeal be dismissed.

- V. Claims 1 and 5 of the main request, with feature references added by the Board to claim 1 in square brackets, read as follows:
- "1. Process to operate an oven (1) comprising:
- [A] a first chamber (3) and a second chamber (4), which are separated by separation means (2), 0
  - [B] each chamber comprising a rotatable drum (5, 6)

- [C] a conveyor belt (7) for guiding products from the inlet (10) through these chambers (3, 4) to the outlet (12), 0
- [D] the conveyor belt is guided around each drum in a helical path (8, 9) and wherein the conveyor belt enters the oven (1) via the inlet (10) by a straight belt section (11) and leaves the oven (1) via the outlet (12) by a straight belt section (14) and wherein the two helical paths (8, 9) are connected by a straight belt section (14), which lies at the top,
- [E] wherein the separation means (2) comprise a passage (2.1) for the belt section (14), the passage being larger than the conveyor belt,
- [F] temperature control means (15, 19, 22, 16, 27, 28) for controlling the temperature in each chamber individually using a fluid, respectively,
- [G] each chamber comprises at least one fan (16, 22) and ducts for a fluid circulation in the chamber and
- [H] a passage (2.1) in the separation means (2) through which the conveyor belt is directed from the first chamber (3) to the second chamber (4), characterized in, that
- [I] the magnitude and the direction of the leakage between the first chamber (3) and the second chamber (4) or vice versa and to or from the ambient is controlled in order to adjust process parameters in one chamber (3, 4), by reducing the pressure in one chamber or increasing the pressure in one chamber
- [J] and wherein in case the temperature in a chamber is below or above a desired set point, a controlled leakage via the passage (2.1) or any other fluid-connection between the two chambers is initiated and maintained until the temperature is

in the respective chamber (3, 4) are in the desired range and then stopped".

"5. Process according to claim 1 where a further leakage to the ambient takes place at the inlet (10) and/or outlet (12)".

VI. The appellant-proprietor's arguments can be summarised as follows:

Features I and J of granted claim 1 are sufficiently disclosed.

VII. The respondent-opponent's arguments can be summarised as follows:

Features I and J cannot be carried out. Claim 1 relates to a prior art oven, which the patent explains suffers from uncontrolled process fluid leakage, so a controlled leakage as feature I requires is unrealisable. Feature I could only be realised with means at the inlet and outlet of the oven for controlling pressure but these are neither disclosed in the patent nor known from general knowledge. The patent does not disclose a pressure control system, so the skilled person would be unable to implement a reduction or increase in chamber pressure as feature I requires.

### **Reasons for the Decision**

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

The invention relates to a process to operate an oven having two separate chambers and a conveyor means for guiding products from an inlet, through the two

chambers to an outlet (see published patent specification, paragraph [0001]). Each chamber has its own heating and ventilation means, so that different temperature, humidity and/or fluid-flow-conditions can be set in respective chambers. According to the patent, such ovens are known from the prior art, but these suffer from the problem that the cooking process is often unstable/not reproducible. The patent attributes this to the different conditions in the two chambers causing an uncontrolled leakage of process gas between them. The invention aims to overcome this problem (see published patent specification, paragraphs [0004], [0005], [0009] and [0018]).

3. Main request, claim 1, sufficiency of disclosure
  - 3.1 Claim 1 as granted is to a process to operate an oven. The preamble of the claim (see features A to H) defines certain features of the oven. In summary, it has first and second chambers, conveyor belts for carrying the goods to be cooked through the chambers. Goods are carried from the first to the second chamber on a conveyor belt section that passes through a passage in a [chamber] separation means. Each chamber is provided with [fluid] temperature control means, at least one fan and ducts for circulating the fluid. It is common ground that the skilled person can provide such an oven, and therefore the aspects of the invention defined in the preamble are sufficiently disclosed.
  - 3.2 According to the first characterising feature, step I, leakage between chambers and to ambient is controlled by adjusting the pressure in one chamber.
  - 3.3 The opposition division (see impugned decision, reasons 2.2.3) considered that it was impossible to achieve

feature I's [simultaneous] control of the leakage between chambers and to the ambient by merely adjusting the pressure in one chamber. Rather, it found that this would require a further independent control element such as an air knife at the inlet or outlet of the chambers, which had not been disclosed in the patent. In the absence of such a control element, the opposition division considered that the skilled person would be unable to carry out the invention, and thus decided that the invention was insufficiently disclosed.

- 3.4 The question of sufficiency of disclosure here must be addressed from the point of view of a skilled person, an engineer specialising in conveyor ovens in which heated fluid circulates. They would therefore be familiar with fluid mechanics and control systems for such ovens.
- 3.5 In the Board's view, the skilled person would know how to set a pressure in each chamber relative to ambient pressure by operating the various fans disclosed in the patent including the fans 16 and 22 that are also present in the prior art oven of figure 1 (see paragraph [0019]). Since a fluid will always flow from a higher to a lower pressure region (cf. published patent specification, paragraphs [0015] and [0016]), by choosing appropriate pressures for each chamber (relative to each other and ambient) the *direction* of leakage between first and second chambers and to or from the ambient is made predictable, in other words controllable, as feature I requires. It goes without saying that the skilled person would know the dimensions of the oven's inlet, outlet and of the passage between chambers. By applying their basic knowledge of fluid mechanics (amongst other things,



flow volume depends on the area of a passage and pressure differential across it) they would be able to select suitable pressure values for each chamber to control the *magnitude* of leakage flows between chambers and to or from the ambient. The skilled person would therefore encounter no difficulties in carrying out step I of the claim.

3.6 In this regard, the respondent-opponent has argued that, where pressures were chosen just for the purpose of introducing [cold and unconditioned] ambient air into the oven, this would disturb process parameters in the oven, in other words make them worse and therefore prevent the skilled person from carrying out the invention - which has as its central goal the achievement of *stable conditions* in the oven (cf. published patent specification, paragraph [0004]). This argument is predicated on the idea that the conditions in the oven prior to introducing ambient air would be as desired, in other words need no adjustment. However, this is not what feature I says. Nor is this what the description discloses. Rather, feature I defines introducing air from the ambient amongst other fluid flows, for the very purpose of *adjusting* process parameters in the chamber. This is likewise explained in the published patent specification, paragraph [0007], last sentence and paragraph [0023] - *controlled* leakage influences conditions in the chambers in order to control temperature amongst other things. Therefore, the argument is moot.

3.7 The respondent-opponent has furthermore argued that feature I cannot be carried out because the preamble of the claim defines a prior art oven and the patent itself teaches (see paragraphs [0009] and [0018]) that in such an oven, leakage between the chambers is

unpredictable, so the claim merely expresses an unrealisable desire without disclosing means to achieve it. The Board disagrees.

- 3.8 It may well be that the preamble of process claim 1 defines features of a prior art oven. However, the respondent's argument hinges on the idea that the characterising part of the claim defines process conditions which would also exist in such a prior art oven. In the Board's view, this is not the case. Step I of claim 1 defines to control the process parameter of *pressure* in a chamber, so it defines to operate the oven mentioned in the preamble in a particular way to achieve controlled leakages. Paragraphs [0009] and [0018] of the patent do not mention any particular pressure regimes being applied to a prior art oven. At most, paragraph [0018] acknowledges that [process fluid] leakage can be influenced by internal and external conditions in general without elaborating which. Therefore, the claim itself discloses a particular way of operating an oven (setting chamber pressure) which plausibly controls fluid flows between the chambers and to and from the ambient, which is not how prior art ovens are described in the patent as operating. Therefore, the argument is not convincing.

Moreover, whether or not the claim, which is as granted, might omit an essential feature for implementing the pressure control as the respondent-opponent has also suggested, plays no role in the assessment of sufficiency of disclosure. This is because sufficiency must be assessed by looking at the entire disclosure, not just the claim (see Case Law of the Boards of Appeal, 10th edition, 2022 (CLBA), II.C. 3.1 and T0032/84, headnote for example). At most, such an omission might amount to a clarity issue, which is

not an opposition ground. Therefore, the argument is moot.

3.9 The respondent-opponent also argued that merely altering the pressure in the chambers would not be sufficient to achieve a certain magnitude and direction of leakage between chambers and to or from the ambient, and the patent only discloses how to control leakage at the passageway between chambers. Therefore, also for this reason the patent would be insufficiently disclosed.

3.9.1 The Board sees no reason as to why adjusting the pressure in the chambers alone would not produce the claimed effect of controlling the leakage between chambers and the ambient, as this is dictated by fluid mechanics.

3.9.2 It is not disputed that the patent explains specific features for locally influencing the pressure at the passageway between the chambers (see for example paragraph [0011]) - fluid is separated from the main circulating flow to control leakage at the passage and in the following paragraph this can be *injected in the vicinity of the passage* in a controlled manner. Similarly according to paragraph [0020], a tube in the passageway can inject air directly into the passageway and controlled in magnitude to control leakage via the passageway.

In the Board's view, contrary to how the respondent-opponent has argued, the patent also discloses sufficient information for the skilled person to be able to locally influence the pressure at the [product] inlet and outlet: For example, according to paragraph [0021], penultimate two sentences (emphasis added by

the Board): The reduction of the pressure in chamber 3 can be executed by *removing air* from this chamber for example *through the inlet 10*. Likewise, air can be *forced into chamber 4* to increase its pressure, for example *via outlet 12*. Similar statements are found in paragraph [0022]. The Board has no doubt that the skilled person knows from the patent, and indeed their general knowledge, that air can be forced with a fan (cf. paragraphs [0013] and [0014]), just as they know from the patent that a fan can force air to move air at the passageway between chambers (cf. paragraphs [0011] and [0012]).

Amongst other things, this means that from the patent and their general knowledge the skilled person would have the wherewithal for setting the pressure in a chamber by, amongst other things, creating a controlled flow of air to or from the ambient at the oven's [product] inlet and outlet - however large these might be, and however unpredictable the products and the conveyor moving through these might make airflow *in the absence of* any such controlled flow (cf. published patent specification, paragraph [0018]).

The additional question as to whether or not an air knife at the inlet and outlet of the oven could achieve such a pressure control and whether it would be generally known can be left unanswered (cf. impugned decision, point 2.2.3).

- 3.10 The respondent-opponent has furthermore argued that the patent does not disclose a *pressure control system*, so also for this reason the skilled person would not be able to carry out the invention. The Board does not find this convincing for the following reasons:

Paragraph [0012] of the published patent specification explains that control can be implemented by manual adjustment or using a PLC (Programmable Logic Controller). Therefore, rather than disclosing only a control arrangement amounting to a "black box" for the skilled person, as the respondent-opponent has contended, the patent explicitly discloses a suitable platform for implementing pressure control, and one which the skilled person would be able to programme from their general knowledge. Whilst it is true that the patent does not provide any further detail of the PLC and its control, for example that it is a closed loop control which would need inputs from pressure sensors, the Board holds that the skilled person would know how to realize an appropriate PLC control, whether open loop or closed loop with pressure feedback from appropriately placed sensors to measure pressure in the chambers and the ambient.

4. For all these reasons, the Board considers that the skilled person would be able to carry out step I of claim 1 of the main request. The Board thus confirms its provisional opinion expressed in its communication (see section 3.2).
5. In written appeal proceedings, the respondent-opponent raised further objections by reference to its opposition notice, that the invention is insufficiently disclosed because the skilled person cannot carry out step J of claim 1 nor the step defined in dependent claim 5. In its communication (see section 3.3), the Board commented on these objections. The Board wrote the following:

*3.3 In its reply to the appeal of 23 November 2022 (page 9, point 3), the respondent-opponent makes*

reference to a further argument of insufficiency of disclosure (opposition notice, pages 19 to 22). This firstly concerns the final claim [1] feature, J, with feature I and secondly claim 5 as granted.

3.3.1 Regarding the first of these objections, the respondent-opponent does not argue that feature J (performing controlled leakage between chambers to reach a set temperature) cannot be carried out, as such. Nor does the Board see why it could not be carried out. However, the respondent-opponent argues that, performing step J would cause uncontrolled leakage at the inlet and outlet which would impair the "process conditions" in either chamber. In the Board's view, the argument boils down to it not being possible to perform feature I. As the Board has already explained, it considers that this feature can be carried out, therefore the argument is moot.

3.3.2 Regarding the second objection (see opposition notice page 4 - feature N - and page 22, last three lines), this is that the invention according to claim 5 cannot be carried out (further leakage to the ambient) because this would be incompatible with the subject matter of claim 1. The argument appears to be based on the premise that the further leakage to the ambient mentioned in claim 5 is uncontrolled. In claim 5, the Board sees no such reference, either explicit or implicit, to an uncontrolled leakage. Thus achieving claim 5's further leakage requires application of the same knowledge as the leakage to the ambient mentioned in claim 1. Therefore this is sufficiently disclosed for the reasons explained for the corresponding feature of claim 1.

5.1 Neither in written proceedings nor at the oral proceedings did the parties comment on these aspects of the communication. In the absence of any such comments, the Board sees no reason to deviate from its provisional opinion on these points. Therefore, the Board confirms that the skilled person can carry out the aspects of the invention expressed in step J of claim 1 and dependent claim 5.

6. For these reasons, the Board considers that the invention according to the main request is sufficiently disclosed. This means that the Board cannot confirm the opposition division's finding (see impugned decision, section 2.2) that the opposition ground of Article 100(b) EPC prejudices maintenance of the patent in suit according to the main request. Therefore, the Board need not consider the auxiliary requests of the appellant-proprietor.

7. Remittal of the case to the opposition division

7.1 The notice of opposition also raised opposition grounds under Articles 100(a) and (c) EPC. In its communication (see sections 7 and 8), the Board expressed its provisional opinion that, in the present case there were special reasons for not dealing with these matters itself but rather it intended to remit the case to the opposition division to consider these matters, Article 11 RPBA 2020.

7.2 The Board wrote the following:

*7. Opposition grounds of added subject matter and inventive step and request of both parties for remittal*

7.1 *The matter of added subject matter for the main request was discussed at the oral proceedings before the opposition division and it reached the conclusion that the subject matter of claims 1 and 5 do not add subject matter extending beyond the application as filed (see minutes, sections 2 and 3. At these oral proceedings, the parties also appear to have been given the opportunity to comment on the issue of inventive step of the main request (see section 4), however the opposition division did not give an opinion on the matter. The issue of added subject matter and inventive step for the auxiliary requests was neither discussed at the oral proceedings (cf. minutes point 5.2) nor decided upon by the opposition division (cf. impugned decision, section 3).*

*In the impugned decision, no final decision or any reasoning for the opposition division's positive opinion on added subject matter for the main request was given. Nor was inventive step dealt with. Neither the parties nor the Board can do more than speculate how the opposition division might have argued the matter of added subject matter or have decided and argued on the matter of inventive step.*

8. *The absence of any written decision on these issues means that, were the Board to deal with them, it would need to examine them in their entirety. To do so would involve considerable investigative effort and require giving a first ruling on these issues. The Board sees this as running contrary to the judicial review character of an inter partes appeal proceedings (cf. Article 12(2) RPBA 2020, G 10/91, reasons, point 18). In the present case, this is all the more pertinent since both parties have requested remittal in order for the opposition division to decide these issues (see*



*proprietor's appeal grounds, point 1 and opponent's reply of 23 November 2022, page 11, point 6). In the Board's view these constitute special reasons which would justify a remittal. Therefore, if the Board finds any of the requests to be sufficiently disclosed, it intends to remit the case to the opposition division, Article 11 RPBA 2020.*

- 7.3 At the oral proceedings before the Board, the parties made no comment on this issue. Nor does the Board see any reason to deviate from its provisional intention to remit the case.
8. Since the grounds for the decision to revoke the patent based on the opposition ground under Article 100(b) EPC have been shown to be incorrect, the impugned decision must be set aside. Moreover, because the opposition division has yet to reach a decision on the remaining opposition grounds, the Board has decided to remit the case to the opposition division for further prosecution, Article 111 (1) EPC and Article 11 RPBA 2020.

## Order

**For these reasons it is decided that:**

1. The decision under appeal is set aside.
2. The case is remitted to the opposition division for further prosecution.

The Registrar:

The Chairman:



G. Magouliotis

A. de Vries

Decision electronically authenticated