Internal distribution code:

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

Datasheet for the decision of 3 March 2020

Case Number: T 0956/16 - 3.3.09

Application Number: 08837198.4

Publication Number: 2200447

IPC: A23C19/16

Language of the proceedings: EN

Title of invention:
PROCESS FOR FOIL RIPENING OF CHEESE

Patent Proprietor:
DSM IP Assets B.V.

Opponent:
Cryovac, Inc.

Headword:
Process for foil ripening of cheese/DSM IP

Relevant legal provisions:
EPC Art. 83, 123(2)

Keyword:
Amendments - allowable (yes)
Claims - clarity in opposition proceedings
Sufficiency of disclosure - (yes)

Decisions cited:
G 0003/14

Europäisches Patentamt
European Patent Office
Office européen des brevets

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 0956/16 - 3.3.09

D E C I S I O N
of Technical Board of Appeal 3.3.09
of 3 March 2020

Appellant: (Patent Proprietor)	DSM IP Assets B.V. Het Overloon 1 6411 TE Heerlen (NL)
Representative:	DSM Intellectual Property P.O. Box 4 6100 AA Echt (NL)
Respondent: (Opponent)	Cryovac, Inc. 100 Rogers Bridge Road Duncan, SC 29334 (US)
Representative:	Uexküll & Stolberg Partnerschaft von Patent- und Rechtsanwälten mbB Beselerstraße 4 22607 Hamburg (DE)
Decision under appeal:	**Decision of the Opposition Division of the European Patent Office posted on 30 March 2016 revoking European patent No. 2200447 pursuant to Article 101(3)(b) EPC.**

Composition of the Board:

Chairman	A. Haderlein
Members:	F. Rinaldi
	D. Rogers

Summary of Facts and Submissions

I. This decision concerns the appeal filed by the patent proprietor (appellant) against the decision of the opposition division to revoke European patent No. 2 200 447.

II. In the opposition proceedings, the opponent had requested revocation of the patent based on Article 100(a) EPC (lack of novelty and lack of inventive step) and 100(b) EPC.

III. The following documents were cited during the opposition proceedings and are referred to in this decision:

D1: ASTM E 96 - 00
D2: ASTM D 3985 - 05
D3: ASTM F 1927 - 07
D17: ASTM F 1307 - 02

IV. On appeal, the appellant filed several sets of auxiliary requests, including auxiliary request 4A, filed under cover of a letter dated 6 February 2020.

During the oral proceedings held before the board on 3 March 2020, the appellant made this request its sole claim request.

V. Claims 1, 4, 5 and 11 of auxiliary request 4A read as follows:

"1. Process for preparing foil-ripened cheese comprising (i) introducing cheese after brining into a cheese-aging packaging containing an opening for receiving cheese, (ii) closing the packaging, and (iii) ripening the cheese, characterized in that the cheese-aging packaging comprises a thermoplastic, monolithic film and the closed cheese-aging packaging has a water vapor transmission rate of at least 10 g/m²/24 hours at 10°C and 85% relative humidity and an oxygen permeability of at most 100 cm³/m²/24 hours/atm at 10°C and 85% relative humidity, characterized in that the thermoplastic polymers in the thermoplastic film consist essentially of polyamide and polyetherester and/or polyetheramide, and that the ether content in the thermoplastic film is at least 1 wt.% (relative to the total amount of thermoplastic polymers in the thermoplastic film).

4. Process according to any one of the preceding claims, characterized in that the thermoplastic polymers in the thermoplastic film consist essentially of polyamide and polyetherester and/or polyetheramide.

5. Process according to claim 3 or 4 characterized in that the ether content in the thermoplastic film is at least 1 wt.% (relative to the total amount of thermoplastic polymers in the thermoplastic film).

11. A cheese-aging packaging containing an opening for receiving cheese to be ripened, characterized in that the cheese-aging packaging comprises a thermoplastic, monolithic film and the closed cheese-aging packaging has a water vapor transmission rate of at least 10 g/m²/24 hours at 10°C and 85% relative humidity and an oxygen permeability of at most 100 cm³/m²/24 hours/atm at 10°C and 85% relative humidity, and the closed

cheese-aging packaging having dimensions corresponding to the dimensions of the ripened cheese block, characterized in that the thermoplastic polymers in the thermoplastic film consist essentially of polyamide and polyetherester and/or polyetheramide, and that the ether content in the thermoplastic film is at least 1 wt.% (relative to the total amount of thermoplastic polymers in the thermoplastic film)."

The underlining is added by the board and shows the modifications added to granted claims 1 and 14, the latter being renumbered as claim 11 of the sole request. Granted claims 1, 4, 5 and 14 are identical to claims 1, 4, 5 and 14 of the application as filed.

VI. The appellant's arguments relevant to the present decision may be summarised as follows:

Article 123(2) EPC: Claim 11 was directly and unambiguously derivable from claims 4, 5 and 14 and the description of the application as filed.

Article 84 EPC: The feature added to claim 11 was present in the granted claims and therefore it could not be examined under Article 84 EPC.

Article 83 EPC: The opposition division's decision on sufficiency of disclosure was correct. As regards the ether content, the patent included instructions on how to prepare the thermoplastic polymers, and the skilled person would have known methods for determining the ether content. Moreover, the respondent had not carried out measurements showing that the skilled person would not have been able to reproduce the claimed invention.

VII. The respondent's arguments relevant to the present decision may be summarised as follows:

Article 123(2) EPC: In the application as filed, there was no direct and unambiguous basis for the amendment in claim 11. Nor was the amendment based on the dependent claims of the application as filed.

Article 84 EPC: The amendment in claim 11 added unclear subject-matter as regards the ether content.

Article 83 EPC: The patent disclosed a method (D2) for measuring the oxygen permeability, also referred to as the oxygen transmission rate (OTR). This method was only suited for measurements under low relative humidity and was not applicable to closed cheese-aging packaging. Other methods were available for measuring the OTR (D3, D17), but there was no information in the patent as to which method was applicable. Moreover, the method used for measuring the water vapour transmission rate (WVTR) was ill-defined. As regards the ether content, no instructions were given on how to distinguish between the ether sections and the non-ether sections of the polyetherester respectively polyetheramide for measuring the claimed ether content. In addition, no measuring method was disclosed in the patent.

VIII. The parties' requests were:

The appellant requested that the decision under appeal be set aside and that the patent be maintained upon the basis of auxiliary request 4A, filed under cover of a letter dated 6 February 2020.

The respondent requested that the appeal be dismissed.

Reasons for the Decision

1. The patent concerns a process for preparing cheese ripened in a closed packaging. It comprises a thermoplastic film which consists essentially of specific thermoplastic polymers and has specific values for the water vapor transmission rate (WVTR) and the oxygen permeability, also referred to as the oxygen transmission rate (OTR). The patent also relates to the corresponding packaging.

2. *Article 123(2) EPC*

2.1 Claims 1 and 11 of auxiliary request 4A, i.e. the sole request, differ from granted process claim 1 and granted product claim 14 (identical to claims 1 and 14 as filed) in that the following feature was added to these two independent claims:

> "characterized in that the thermoplastic polymers in the thermoplastic film consist essentially of polyamide and polyetherester and/or polyetheramide, and that the ether content in the thermoplastic film is at least 1 wt.% (relative to the total amount of thermoplastic polymers in the thermoplastic film)"

This feature will also be referred to as feature A.

2.2 Claim 1 of the sole request is directly and unambiguously derivable from claims 1, 4 and 5 of the application as filed. This was not contested.

2.3 The respondent's argument was that claim 11 included added subject-matter. Contrary to claim 1 as filed, claim 14 of the application as filed, on which claim 11 is based, did not include dependent claims which disclosed the subject-matter of feature A. Nor did, the respondent argued, the description of the application as filed provide a direct and unambiguous basis for feature A.

2.4 This is not persuasive.

2.4.1 Feature A further specifies the cheese-aging packaging used in the process of claim 1 by defining the thermoplastic polymers in the thermoplastic film. In the same way, feature A further specifies the cheese-aging packaging of product claim 11 by defining the thermoplastic polymers in the thermoplastic film.

2.4.2 There is nothing in the application as filed to suggest that the thermoplastic polymers in the thermoplastic film used in the process of claim 1 are to be defined differently from those to which claim 11 relates. On the contrary, the skilled person would have understood that the way in which thermoplastic polymers are defined equally applies to all thermoplastic films of the invention, namely those of product claim 11 and those used in the process of claim 1.

2.4.3 It is true that alternative definitions for the thermoplastic polymers in the thermoplastic film exist in the application as filed, for instance on page 6, lines 24 to 28, and on page 8, lines 3 to 11. But this simply means that different thermoplastic polymer compositions may be used in the thermoplastic films of the invention, some of which are disclosed in the

description, others being disclosed in dependent claims 4 and 5 of the application as filed.

2.4.4 Therefore, it is directly and unambiguously derivable that the definition of thermoplastic polymers in dependent claims 4 and 5 of the application as filed also applies to the cheese-aging packaging of claim 14 as filed. Consequently, claim 11 does not include added subject-matter.

2.5 Thus, claims 1 and 11 comply with the requirements of Article 123(2) EPC.

3. *Objection of lack of clarity*

3.1 In contrast to claim 14 as granted, claim 11 of the sole request requires a specific ether content in the thermoplastic film. The respondent argued that it was not clear how to establish this content. Therefore, claim 11 lacked clarity.

3.2 However, the parties agree that in view of G 3/14 claim 1 may not be examined for compliance with the requirements of Article 84 EPC.

In accordance with G 3/14, in considering whether, for the purposes of Article 101(3) EPC, a patent as amended meets the requirements of the EPC, the claims of the patent may be examined for compliance with the requirements of Article 84 EPC only when, and then only to the extent that the amendment introduces non-compliance with Article 84 EPC (Reasons 81). As feature A stems from granted dependent claims 4 and 5, the amendment in claim 1 cannot be said to introduce non-compliance with Article 84 EPC.

3.3 The question now is whether independent claim 11 may be examined for compliance with the requirements of Article 84 EPC. As explained above in point 2, claim 11 is granted claim 14 with the characterising parts of granted claims 4 and 5 (feature A) added to the end of it. The issue to be addressed is if this amendment adds ambiguity that was not present in the granted claims. In the granted set of claims, there were no claims dependent on product claim 14 which corresponded to dependent claims 4 and 5 as granted.

3.4 However, feature A, now added to claim 11, has the same technical context in claim 11 as it had in granted claims 1, 4 and 5.

3.4.1 In more detail, granted claims 1, 4 and 5 relate to a process which involves the use of a cheese-aging packaging that is defined by a combination of features (as in granted claim 1) and by feature A (as in granted claims 4 and 5). In the same way, product claim 11 is directed to a cheese-aging packaging defined by a combination of features present both in granted product claim 14 and granted process claim 1, and also by feature A.

3.4.2 Therefore, the feature which allegedly adds unclear subject-matter in claim 11, feature A, was already in the set of granted claims, i.e. in granted dependent claim 4 and 5. Moreover, in claim 11, feature A is now in the same technical context as it was in the set of granted claims: i.e. it specifies the cheese-aging packaging.

3.5 Thus, the amendment in claim 11 cannot be said to introduce non-compliance with Article 84 EPC and,

consequently, it may not be examined for compliance with the requirements of Article 84 EPC (G 3/14).

4. *Article 83 EPC*

4.1 The respondent objected that the opposition division erred in deciding that the invention in the opposed patent was sufficiently disclosed.

4.1.1 It argued that there were contradictions in the patent as to the method for measuring the OTR. The ASTM standard D 3985 (D2) mentioned in paragraph [0017] was suited for measuring the OTR in a dry test environment at a relative humidity of less than 1%. D2 referred to ASTM standard F 1927 (D3) for measuring the OTR under conditions of controlled relative humidity. But the method of D3 was not mentioned in the patent and was not suited for measuring the OTR of a closed cheese-aging packaging. While there was a third method suited for measuring the OTR of a closed packaging, ASTM standard F 1307 (D17), no reference was made to it in the patent.

4.1.2 Moreover, it argued that the method for measuring the WVTR described in the opposed patent was ill-defined and not suited for measuring the WVTR of closed cheese-aging packaging.

4.2 These objections are not persuasive.

4.2.1 It is true that according to claims 1 and 11 it is the closed cheese-aging packaging which has a defined WVTR and OTR. However, paragraphs [0016] and [0017] of the patent in suit, where the methods for measuring these two parameters are described, state that the methods are measured on a film ["(measured according to ASTM...

on a film)"]. The same statement is also found in paragraph [0011]. Thus, the skilled person would have understood that the parameters related to the film used in the closed cheese-aging packaging, in which the cheese was added after brining for ripening.

4.2.2 This means that the skilled person would not have considered looking for a method suited for measuring the OTR in a closed package, and they would not have consulted D17.

Instead, the skilled person would have consulted the method in D2, which is referred to in the patent in suit and is suitable for measuring the OTR of films. They would, though, have realised that the method of D2 was for measurements in a dry test environment only. But D2 mentions on page 1 other referenced documents, including D3, which is used for measuring the OTR at controlled relative humidity. The opposition division correctly assessed that in D2 "there is a direct teaching and a pointer which would direct the skilled worker to use the method from document D3" (Reasons for the decision, point 2.3.3).

4.2.3 The respondent also argued that information which according to D3 was required was not included in the patent in suit, namely:

- the partial pressure of the oxygen on the test-gas side of the diffusion cell (D3, point 16.1.4)
- the value of the relative humidity used, both of the oxygen test gas and the nitrogen carrier gas (D3, point 16.1.8)

However, according to D3, the partial pressure of the oxygen on the test-gas side of the diffusion cell is

required only for establishing the value for the permeance (point 15.2). This parameter is not relevant for carrying out this invention.

As regards the lack of information on the relative humidity of the test gas and the carrier gas, the skilled person would have understood that both gases had the same relative humidity.

4.2.4 Turning to the method for measuring the WVTR, D1 describes two basic methods for this purpose, the desiccant method and the water method. In the desiccant method, the test specimen is sealed to the open mouth of a test dish containing a desiccant; in the water method, the dish contains distilled water (D1, points 4.1 and 4.2). The water method more nearly approaches the conditions during cheese ripening and for this reason the skilled person would have applied this method, in particular procedure B of the appendix on page 6.

Although in this method the measurement is carried out at 23°C, the instructions to the skilled person in the patent in suit are unequivocal in that the measurement is to be carried out at 10°C. And there is no manifest technical obstacle preventing the skilled person from using the conditions in D1 and, where appropriate, modifying them following the instructions in the patent in suit.

In view of this, it is not convincing that the skilled person would have had difficulties in measuring the WVTR based on D1 and that they would have been prevented from carrying out the invention described in the claims.

4.3 The respondent also objected that the patent in suit did not describe how to conceptionally distinguish the ether sections (soft blocks) and the non-ether sections (hard polyester/ polyamide) of the polyetherester respectively polyetheramide for determining the claimed ether content.

4.3.1 It is true that there may be some ambiguity due to a lack of information on how to distinguish between the separate sections of the polyetherester or polyetheramide or the method suited for measuring the ether content. However, even the respondent affirmed that methods for determining the ether functionality were available (reply to the statement setting out the grounds of appeal, page 11, second paragraph).

4.3.2 The respondent also argued that the ambiguity regarding the measuring method may lead to different results.

However, it is not convincing that any such ambiguity would have prevented the skilled person from carrying out the cheese-aging packaging described in claims 1 and 11.

4.4 Finally, the respondent objected that there was an inconsistency in the units of the measurements. The unit for the OTR "10 g/m^2.24 hours" in paragraph [0016] of the patent in suit differed from the unit used in claim 1 ("10 g/m^2/24 hours"). An analogous objection was raised as to the term "100 cm^2/m^2.24 hours.atm" in paragraph [0011] (underlining by the board).

However, the units for the WVTR and the OTR are specified in the standards D1 and D3. An inconsistent representation of these units in the opposed patent does not render the disclosure insufficient.

4.5 Thus, the requirement of sufficiency of disclosure set forth in Article 83 EPC is met.

5. *Patentability*

The respondent did not raise any objections as to patentability in respect of novelty and inventive step. The board itself sees no reason to examine these aspects of patentability for this request on its own motion.

6. *Adapted description*

At the oral proceedings before the board, the appellant adapted the description. There remained no contentious issue in the adapted description.

Order

For these reasons it is decided that:

The decision under appeal is set aside.

The case is remitted to the opposition division with the order to maintain the patent as amended in the following version:

Description:
Pages 2 to 10 received during the oral proceedings of 3 March 2020.

Claims:
Claims 1 to 12 of auxiliary request 4A filed under cover of a letter dated 6 February 2020.

Drawings:
Figures 1 and 2 of the patent specification.

The Registrar: The Chairman:

K. Exner A. Haderlein

Decision electronically authenticated