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**Datasheet for the decision
of 17 November 2016**

Case Number: T 0694/12 - 3.2.03

Application Number: 01969403.3

Publication Number: 1317643

IPC: F24C7/08

Language of the proceedings: EN

Title of invention:

METHOD FOR RUNNING A FOOD COOKING OVEN

Patent Proprietor:

ELECTROLUX PROFESSIONAL S.p.A.

Opponent:

Rational Aktiengesellschaft

Headword:

Relevant legal provisions:

EPC Art. 100(c), 56, 114(1)

Keyword:

Decisions cited:

Catchword:



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European Patent Office
D-80298 MUNICH
GERMANY
Tel. +49 (0) 89 2399-0
Fax +49 (0) 89 2399-4465

Case Number: T 0694/12 - 3.2.03

D E C I S I O N
of Technical Board of Appeal 3.2.03
of 17 November 2016

Appellant: Rational Aktiengesellschaft
(Opponent) Iglinger Str. 62
86899 Landsberg am Lech (DE)

Representative: Weber-Bruls, Dorothee
Jones Day
Nextower
Thurn-und-Taxis-Platz 6
60313 Frankfurt am Main (DE)

Respondent: ELECTROLUX PROFESSIONAL S.p.A.
(Patent Proprietor) Viale Treviso 15
33170 Pordenone (IT)

Representative: Manconi, Stefano
Studio Torta S.p.A.
Via Viotti, 9
10121 Torino (IT)

Decision under appeal: Interlocutory decision of the Opposition
Division of the European Patent Office posted on
3 February 2012 concerning maintenance of the
European Patent No. 1317643 in amended form.

Composition of the Board:

Chairman G. Ashley
Members: Y. Jest
M.-B. Tardo-Dino

Summary of Facts and Submissions

- I. By its decision posted on 3 February 2012 the opposition division decided that European patent Nr. 1317643 could be maintained in amended form on the basis of claims 1 to 6 of the request filed during oral proceedings held on 14 November 2011.

In its interlocutory decision, the opposition division held that the grounds of added subject-matter not originally disclosed (Article 100(c)/123(2) EPC), of lack of clarity (Article 84 EPC), of insufficiency of disclosure (Article 100(b)/83 EPC) and of lack of novelty or inventive step (Article 100(a) EPC) raised by the opponent against the claimed subject-matter did not prejudice the maintenance of the patent. Concerning documents E8 to E12 filed by the opponent after the nine-months opposition period, the opposition decided to introduce E9 and E11 into the proceedings, but not to admit documents E8, E10 and E12.

- II. The opponent lodged an appeal against this interlocutory decision and paid the appeal fees on 23 March 2012. The statement of the grounds of appeal was submitted on 24 May 2012.

- III. The parties made the following requests:

The opponent (appellant) requested that the decision under appeal be set aside and the patent be revoked.

The proprietor (respondent) requested that the appeal be dismissed and the patent be maintained in amended form on the basis of the set of claims considered as allowable by the opposition division (main request) or, subsidiarily, that the decision under appeal be set

aside and the patent be maintained in an amended form on the basis of one of the auxiliary requests 1 to 5, all filed with its letter dated 9 November 2016.

IV. Independent claim 1 of the main and auxiliary requests has the following wording:

(a) Main request

"A method for running a food cooking oven, intended in particular for use in foodservice and catering applications, comprising the introduction of a pin-like core temperature probe (7) in the interior of the food being cooked, the probe generating an electric signal that is representative of the detected temperature, said signal is sent to an appropriate processing and control device (5), said processing and control device (5) works out an information (F) that depends in a combined manner on both the temperatures detected by said probe and-the cooking time, and that said information is a value that is representative of the reduction in the bacterial content of the cooked food, characterized in that said processing and control device selects, for the real-time calculation of said information (F), the lowest temperature being detected by a plurality of temperature sensors located at different points (20,21 ,. . . 25) of said pin-like probe."

(b) Auxiliary request 1

(the feature added to claim 1 of the main request is highlighted in bold characters

(i) as filed by the respondent:

"A method for running a food cooking oven **comprising a pin-like core temperature probe (7)**, intended in particular for use in foodservice and catering applications, comprising the introduction of **the** pin-like core temperature probe (7) in the interior of the food being cooked, the probe generating an electric signal that is representative of the detected temperature, said signal is sent to an appropriate processing and control device (5), said processing and control device (5) works out an information (F) that depends in a combined manner on both the temperatures detected by said probe and the cooking time, and that said information is a value that is representative of the reduction in the bacterial content of the cooked food, characterized in that said processing and control device selects, for the real-time calculation of said information (F), the lowest temperature being detected by a plurality of temperature sensors located at different points (20,21 , . . . 25) of said pin-like probe."

(ii) with numbering references as introduced by the appellant:

1. Method for running a food cooking oven **comprising a pin-like core temperature probe (7)**, intended in particular for use in food service and catering applications, comprising
 - 1.1 the introduction of **the** probe in the interior of the food being cooked,
 - 1.1.1 said probe being a pin-like core temperature probe, and
 - 1.1.2 the probe generating an electric signal that is representative of the detected temperature,
 - 1.2 said signal being sent to an appropriate processing and control device,

- 1.2.1 said processing and control device working out an information that
- 1.2.2 depends in a combined manner on both the temperatures detected by said probe and the cooking time, and
- 1.2.3 said information being a value that is representative of the reduction in the bacterial content of the food cooked
- 1.3.3 said processing and control device selects the lowest temperature being detected
- 1.3.4 by a plurality of temperature sensors located at different points of said pin-like probe,
- 1.3.5 said selection being made for the real-time calculation of said information."

(c) Auxiliary request 2

(the feature added to claim 1 of the main request is highlighted in bold characters)

"A method for running a food cooking oven, intended in particular for use in foodservice and catering applications, comprising the introduction of a pin-like core temperature probe (7) in the interior of the food being cooked, the probe generating an electric signal that is representative of the detected temperature, said signal is sent to an appropriate processing and control device (5), said processing and control device (5) works out an information (F) that depends in a combined manner on both the temperatures detected by said probe and-the cooking time, and that said information is a value that is representative of the reduction in the bacterial content of the cooked food, characterized in that said processing and control device **performs the calculation of said information (F) through the integration of the function that is representative of a temperature of the food being**

cooked and selects, for the real-time calculation of said information (F), the lowest temperature being detected by a plurality of temperature sensors located at different points (20,21 ,. . . 25) of said pin-like probe."

(d) Auxiliary request 3

(the feature added to claim 1 of the main request is highlighted in bold characters)

"A method for running a food cooking oven **comprising a pin-like core temperature probe (7)**, intended in particular for use in foodservice and catering applications, comprising the introduction of **the** pin-like core temperature probe (7) in the interior of the food being cooked, the probe generating an electric signal that is representative of the detected temperature, said signal is sent to an appropriate processing and control device (5), said processing and control device (5) works out an information (F) that depends in a combined manner on both the temperatures detected by said probe and-the cooking time, and that said information is a value that is representative of the reduction in the bacterial content of the cooked food, characterized in that said processing and control device **performs the calculation of said information (F) through the integration of the function that is representative of a temperature of the food being cooked and** selects, for the real-time calculation of said information (F), the lowest temperature being detected by a plurality of temperature sensors located at different points (20,21 ,. . . 25) of said pin-like probe."

(e) Auxiliary request 4

(the feature added to claim 1 of the main request is highlighted in bold characters)

"A method for running a food cooking oven... [according to claim 1 of the main request];

the food cooking oven being provided with selector means (5,6) that are adapted to classify the food being cooked according to pre-defined categories (A,B) and to send a multiplicity of predefined values (F0, F1, F2 ... Fn), depending on the selected category, towards said processing and control device, which is in turn adapted to perform a comparison of such worked-out value of F with said values (F0, F1, F2 ... Fn) and to issue respective signals (UNSAFE, SAFE-0, SAFE-1,...) corresponding to the outcome of said comparison, towards appropriate indicator or display means (7)."

(f) Auxiliary request 5

(the feature added to claim 1 of auxiliary request 4 is highlighted in bold characters)

"A method for running a food cooking oven **comprising a pin-like core temperature probe (7)**, intended in particular for use in foodservice and catering applications, comprising the introduction of **the** pin-like core temperature probe (7) in the interior of the food being cooked,... [according to claim 1 of auxiliary request 4]."

V. State of the art

The following documents cited in the disputed decision, were referred to, among others, by the appellant in the appeal proceedings:

- E5 WO-A- 98/048679
- E9 DE-U- 299 23 215
- E11 Extract of textbook:
"Einführung in die Lebensmittelhygiene",
Hans-Jürgen Sinell, Parey Studientexte 21,
3.Auflage,
cover page, page 1 and pages 130 to 140
- E12 EP-A- 1 021 979

VI. The arguments presented by the appellant, insofar as they are relevant for the present decision, can be summarised as follows:

(a) Main request and auxiliary requests 2 and 4

Claim 1 of these requests infringed Article 100(c) EPC because said claims lacked the feature, which was presented as essential in the application documents as originally filed, and which defined that the temperature probe was integral to the food cooking oven.

(b) Document E12

Document E12, which had been disregarded by the opposition division, was highly relevant for the issue of inventive step and therefore to be introduced into the proceedings.

(c) Auxiliary request 1

(i) Novelty

The claimed subject-matter lacked novelty as compared to E9.

E9 disclosed a process for running a food oven, as was derivable from claim 8 and pages 4 and 5 of E9. E9 referred in line 1 of page 5 to an information being a value that is representative of the reduction in the bacterial content of the food cooked ("*Erstellung eines aussagekräftigen Hygienehinweises*"). From page 4, last paragraph, page 5, last paragraph and page 6, first paragraph of E9 ("*Thermokinetik*"), together with the general requirements applicable in the concerned technical field (especially the HACCP-Directive); said information was clearly dependent on a combination of both temperatures, especially the lowest core temperature, as detected by a probe, together with the cooking time.

(ii) Inventive step

If the claimed method for running an oven was considered to differ from the state of the art disclosed in E9 by features 1 and 1.3.3, it would not involve an inventive step.

The method disclosed in E9 applied to cooking devices ("*Gargeräte*") comprising a cooking space ("*Garraum*"). Its application for running an oven was thus clearly obvious. The skilled person would select the lowest value, as suggested by D5, from the four temperatures measured by the probe at different introduction depths in order to determine/select the real core temperature of the food to be cooked.

Alternatively, the skilled person, when starting from E12, which disclosed all the features of claim 1 except 1.3.4, and when looking for a suitable temperature probe, would consider the choice of a multiple sensor probe as disclosed by E5 as an obvious step for

determining if the core temperature of the food cooked reached the hygienic safety temperature.

(d) Auxiliary request 3

The additional feature introduced into claim 1 did not add anything inventive. Since the function is not defined in the claim, the feature requiring the integration of the function had to be assessed as having a broad meaning. The control over a period of time D of the cooking process after the hygienic safety temperature was reached constituted a form of integration. If the function was seen to be limited to the example given on page 4 of the patent in suit, then such a function and its integration were generally known to the skilled person working in the field, as is confirmed by textbook E11.

(e) Auxiliary request 5

The features added in claim 1 were derivable from E12 and therefore added nothing inventive to the claimed method. The food cooking device according to E12 comprised a selector means for classifying pre-defined food categories (paragraph [0025]), and a means for sending a multiplicity of predefined values depending on the selected category towards the processing and control device, so as to perform a comparison of the evaluated value with the predefined values (time D, safety temperature T_s for E12). The device produced at the end a respective optical or sound signal and/or a certificate (paragraphs [0083], [0095]). The method defined in claim 1 thus lacked inventive step.

VII. The respondent submitted essentially the following arguments:

(a) Main request and auxiliary requests 2 and 4

The omission of the feature of originally filed claim 1 defining that the oven comprised the temperature probe did not infringe Article 100(c)EPC. Page 10, lines 15 to 18 of the originally filed description supported the wording of claim 1 of the main request. The original expression "an oven comprising a probe" did not limit the invention to embodiments in which the probe had to be permanently connected to the oven but encompassed for instance also disconnectable probes so as to ease cleaning.

(b) Document E12

The opposition division's decision to disregard document E12 was correct. E12 did not disclose several essential features of claim 1 (features 1, 1.2.2, 1.2.3, 1.3.3, 1.3.4, 1.3.5) and was thus not *prima facie* relevant. E12 was not directed to a method for running an oven. The probe used in E12 had only a single temperature sensor. The information worked out by the control device in E12 related to a curve temperature/time but did not depend in a combined manner on both the temperatures detected and the cooking time. In fact the information worked out in E12 corresponded to the curve R (evolution of core temperature in function of the cooking time) shown in figure 3 of the patent in suit, whereas the information according to claim 1 corresponded to the curved S of figure 3 which illustrated the function F dependent on both temperature and time as defined page 4 of the patent.

(c) Auxiliary request 1

(i) Novelty

The claimed method was novel as compared to E9. In the process of E9 the temperature inside food being cooked was measured by means of a probe provided with sensors, and by extrapolation of food or process related parameters. E9 referred to the hygienic state of the food in general and to some kind of control of the temperature as a function of time (see curve R in Figure 3 of the patent). E9 did not use real time calculated values of a function (F) which were dependent on both temperature and time as defined in the patent in suit, and which were representative of the reduction in the bacterial content. Therefore, E9 did not disclose at least features 1, 1.2.2 and 1.3.3 of claim 1.

(ii) Inventive step

The person skilled in the art, when starting from E9 or E12 as closest prior art, would not have considered E5 because E5 was completely silent about problems relating to food hygiene. The aim of E5 was to determine the remaining cooking time in view of enhancing the browning and crusting aspects of the cooked food.

Moreover, E12 (see paragraph [0020]) clearly recommended that the skilled reader avoid multiple points of temperature measurement, thereby leading away from the general teaching of E5. But even if E12 or E9 were combined with E5, the process resulting therefrom would still lack feature 1.2.2. Accordingly, claim 1 of the main request involved an inventive step.

(d) Auxiliary request 3

The features added to claim 1 should be read in the light of the description, and especially of page 4 of the patent which provides the mathematical definition of the function F.

If in E12 the information to be calculated in real time was the difference between the measured core temperature and the predetermine hygienic safety temperature, then an integration of this information would be meaningless, and the skilled person would have no reason for performing an integration of such an information.

Document E11 was not specific for cooking ovens but merely defined processes for conservation of products in tins/cans. Figure 14 of E11 showed an integration of the function F but not an integration of a function that is dependent on both temperature and time.

The method according to claim 1 of auxiliary request 3 therefore involved an inventive step.

(e) Auxiliary request 5

No document disclosed a selector means for setting food categories, a means for providing predetermined values of F and a means for comparing the value of F with the predetermined values.

If E12 was considered to provide predetermined values for the time range D and for the safety temperature T_s , E12 would still lack selector means for the different food categories.

The claimed method including these additional features thus involved an inventive step.

VIII. At the end of the oral proceedings on 17 November 2016 the board pronounced its decision.

Reasons for the Decision

1. Main request and auxiliary requests 2 and 4

It is clear from the application as originally filed, see especially claim 1, the pin-like core temperature probe is presented as being comprised in the food cooking oven. In claim 1 of the main request and of auxiliary requests 2 and 4, the essential feature defining that the oven comprises the probe is no longer present.

Consequently, the claimed method covers embodiments in which the temperature probe is no longer part of the oven, but is in the form of a fully separate entity. The application as originally filed does not cover such a mode of realisation. The text at page 10, lines 15 to 18, of the originally filed description does not support an option according to which the oven would not comprise the probe, since it merely states that the probe is connected to appropriate decoding circuits.

Claim 1 of the main request and of auxiliary requests 2 and 4 thus infringe Article 100(c) EPC.

2. State of the art

- 2.1 In the impugned decision (see page 3), the opposition division considered that documents E8 to E12 filed after the opposition period were late filed; they decided to admit only documents E9 and E11 pursuant to article 114(2) EPC, and to disregard documents E8, E10 and E12 because they lacked any particular relevance as compared to the documents already on file.

The opposition division merely stated that document E12 showed "less features than other documents which form part of the procedure and do(es) not provide further essential information".

2.2 From the minutes of the oral proceedings held before the opposition division, it appears that:

- the opposition division decided at the beginning not to admit E8 and to postpone the decision concerning the admissibility of the other late filed documents (E9 to E12);
- the opposition division decided that none of documents E5, E9, E11 and E12, was novelty destroying for the subject-matter of claim 1 of the main request,
- the opposition division then decided not to admit E12 because it was less relevant than E5.

This last point is however questionable because of the following considerations.

2.3 In the grounds of the appealed decision, the opposition division stated with respect to the disclosure of E5 (see page 6, second paragraph) that (*emphasis added by the board*) :

"The Division came to the conclusion that the subject-matter of claim 1 of the patent differs from the **document E5** in that the underlying method **fails to work out an information as a single value representative of the reduction in the bacterial content**. In opposite, document E5 only shows the provision of a real-time calculated derivative of the core temperature which cannot be considered as a representative of the bacterial content. **The hygiene/bacterial content is not**

even mentioned in this document."

2.4 The reason given by the opposition division as can be derived from the minutes, namely that E12 was not admitted pursuant to article 114(2) EPC because its content was not novelty destroying and even less relevant than E5 (page 6, third and fourth paragraphs), is questionable, since the object of E12 is clearly directed to the problem of hygiene/bacterial content of cooked food, see paragraphs [0012], [0025], [0092] to [0095], the figures and claim 1 of E12.

E12 is therefore *prima facie* relevant because it shows an essential aspect of the claimed invention which, according to the conclusion of the opposition division (see page 7 of the appealed decision), is not disclosed in any document already admitted in the proceedings, namely the hygiene/safety problem in cooking processes.

2.5 In summary the board notes that:

- the content of late filed document E12 has been analysed in detail in the context of the issue of novelty, which would lead to the normal expectation that this document would be *de facto* in the proceedings (see Case Law of the Boards of Appeal, 8th Edition 2016, IV.C.1 d), page 937 concerning the discussion of T 68/02);
- the way in which the opposition division exercised its discretion in not admitting E12 into the proceedings, concluding that its content was less relevant than E5 or any other document in the proceedings, is based on unreasonable or incomplete considerations.

2.6 Under these circumstances, the board, in accordance with established case law of the boards of appeal with

respect to the requirements concerning the exercise by the first instance of its discretion, exercises its competence to overrule the decision of not admitting E12 into the proceedings.

2.7 Document E12 is thus admitted into the proceedings pursuant to article 114(1) EPC.

3. Auxiliary request 1

3.1 Novelty

The subject-matter of claim 1 is novel with respect to the state of the art on file, since none of the cited documents discloses a method for running a food cooking oven with all the features of claim 1.

The appellant argued lack of novelty on the state of the art known from E9.

3.1.1 The invention disclosed in E9 concerns a method for running a food cooking device ("Gargerät") of the type provided with a cooking space ("Garraum"), cooking programs ("Garprogramme"), see page 4, last paragraph, as well as different optional components ("Lüfter, Einrichtung zum Ein- bzw. Abführen von Feuchtigkeit in den bzw. aus dem Garraum"), see claims 8 and 9, which in combination implicitly refer to a cooking oven. The oven comprises a multi-sensor pin-like core temperature probe 10 to be inserted into the food (claim 1, figure). The probe sends electrical signals, representative of the measured core temperatures, to a controller which determines, e.g. by extrapolation, the real core temperature from the given signals (claims 1 and 2, first paragraph of page 6). On the basis of the exact determination of the core temperature it is

possible to create a certificate of hygiene for the cooked food (page 5, line 1). It is clear to the board that such a certificate implicitly also delivers information about the bacterial content, namely that the bacterial content of the cooked food has been sufficiently reduced.

Further, the processing and control device of E9 works out an information (safety certificate, see page 5, line 1) that depends in a combined manner on both the core temperatures detected by said probe and the cooking time ("Thermokinetik", see last paragraph of page 5 and first paragraph of page 6). This information is a real-time calculated/established value indicating that the cooked food meets the hygienic safety standards, and is thus also a value that is representative of the reduction in the bacterial content of the food cooked.

- 3.1.2 The claimed method differs from the teaching of E9 by the characterising feature 1.3.3 defining that said processing and control device selects the lowest temperature being detected. The sole example in E9 of how the four values measured by the multi-sensor temperature probe 10 are used by the processing and control device is given in claim 6 and at page 6, first paragraph, namely to determine the exact value of the core temperature by extrapolation.

The method according to claim 1 of auxiliary request 1 is thus new over the state of the art known from E9.

3.2 Inventive step

3.2.1 Starting point: E12

The state of the art disclosed in E12, see especially claims 1 and 3, paragraphs [0012], [0017] and [0092] to [0095], concerns a method for running a food cooking device having features 1 to 1.3.2 and 1.3.5.

The cooking device comprises heating means 8,16 and a pin-like core temperature probe 12, which is introduced into the interior of the food 3 being cooked.

The probe generates an electric signal that is representative of the detected temperature T_c (figure 5 of E12). The signal is then sent to an appropriate processing and control device UNFO (figure 4), which compares in real time in module COMP the measured value T_c with the predefined value of the hygienic safety temperature T_s for the food to be cooked. The heating process is maintained over a period of time which is recommended or legally imposed for achieving an adequate destruction of pathogenic germs and micro-organisms, see paragraph [0094]. There is no doubt for the skilled reader that the sanitary/hygienic safety temperature T_s maintained for a given time D is an information/value that is representative of the reduction in the bacterial content of the cooked food. The processing and control device UNFO commands the heating means 8,16 as a function of the difference between the measured core temperature T_c and the safety temperature T_s , and also as a function of the minimum period of time D during which the heating means are maintained before being stopped when the core temperature T_c achieves a final value of the temperature T_{fc} (claim 12). The processing and control device UNFO thus works out an information that depends in a combined manner on both the temperatures T_c detected by said probe 12 and the cooking time D at a temperature equal or higher than T_s .

3.2.2 Difference - Objective technical problem

The method of claim 1 thus differs from the state of the art disclosed in E12 by features 1.3.4 and 1.3.3, namely that:

- a plurality of temperature sensors are located at different points of said pin-like probe, and
- the processing and control device selects the lowest temperature detected.

These distinguishing features enable a more accurate detection of the core temperature, i.e. the lowest detected value, which is determinant for qualifying the cooked food as sanitarily safe.

The objective technical problem can thus be defined as further developing the method of E12 in order to give precise information about the sanitary safety of the cooked food, which implies improved detection of the core temperature during the cooking process.

3.2.3 Obvious solution

Prior art document E5 discloses the use of a core temperature probe, which is provided with several temperature sensors, the advantage of a multiple sensor probe being that the process device can either determine an average value of the core temperature of the cooked food or select the lowest detected value for the core temperature (see last paragraph of page 9). The skilled reader understands that the selection of the lowest detected value enables a more precise determination of the core temperature in the cooked food, because it avoids or at least minimizes errors of measurements due to an incorrect/unprecise introduction/location of the probe in the food.

The multiple sensor probe of E5 thus allows a more precise determination of the core temperature and thus contributes to better information about the sanitary safety of the cooked food.

The person skilled in the art would therefore consider it to be an obvious step to provide the cooking device of E12 with a multiple sensor pin-like probe and to select the lowest value as representative of the core temperature, in order to improve the information about the safety of the cooked food.

The respondent argued that the skilled person would not envisage the use of a multi-sensor probe for the process disclosed in E12, since it would diverge from the essential teaching of paragraph [0020] of E12, which tells the skilled person on the contrary to avoid multiple measurements of the temperature made in various locations.

This argument is not convincing because of the following consideration. The disclosure in paragraph [0020] is not to be considered in isolation, but must be read in context. E12 describes in paragraphs [0018] and [0019] that the method according to the invention of E12 is for cooking a plurality of food elements, and is characterised by detecting and controlling the core temperature of a single sample food element as is represented in figures 1, 3 and 4 of E12. According to E12, the use of a single temperature probe introduced into a sample food element is sufficient to certify the sanitary safety of all the simultaneously cooked food elements, as long as the safety core temperature for the sample element has been reached.

The text of paragraph [0020], which follows immediately the aforementioned essential teaching, can only be read as an advantage of the claimed method of E12, namely to

avoid providing temperature sensor probes for all food elements to be cooked together. This does not, however, teach the skilled person to avoid using a multi-sensor temperature probe for the sample food probe.

The skilled person would thus have considered using a multi-sensor temperature probe known from E5 for enhancing the detection of the core temperature within the sample food element in the process of E12.

3.2.4 The method of claim 1 of auxiliary request 1 thus lacks the inventive step in the meaning of Article 56 EPC.

3.2.5 As a result the appellant's second attack of lack of inventive step based on the combination of E9 as closest prior art and E5 does not need to be analysed and does not require a decision.

4. Auxiliary request 3

4.1 Claim 1 of auxiliary request 3 is based on the combination of claim 1 of auxiliary request 1 with additional features based on dependent claim 6 as granted. The additional features read:

"said processing and control device performs the calculation of said information (F) through the integration of the function that is representative of a temperature of the food being cooked."

4.2 The board considers that the meaning of the additional features is relatively general and broad, since the exact nature of the information or of the function is not defined in the claim.

In the absence of additional limiting features the expression "integration" is to be considered in general terms and applies also for the process of E12, for

instance in the sense that the heating means are maintained operational for a period of time D after the detected core temperature T_c has reached the sanitary safe temperature T_s . Such a control falls under the general term of integration.

4.3 The respondent argued that claim 1 of auxiliary request 3 was to be read in the light of the description and that the function or information was nothing else than the function of the sterilisation effect F as defined pages 3 and 4 of the patent in suit.

4.4 The board cannot share this approach in the sense that nothing indicates in claim 1 that the function/information must actually correspond to the sterilisation effect F as defined in the description and illustrated in figure 3 of the patent (thick line). The respondent however did not deny during oral proceedings that one could envisage other functions for monitoring the bacterial content in a cooked food, one of those being the evolution of the core temperature in time. This function is represented by curve R in figure 3 of the patent (thin line) and corresponds to the function monitored in E12.

4.5 If the function or information of claim 1 were to be interpreted in a very limited way, namely as the sterilisation effect F defined on pages 3 and 4 of the description, the claimed method would not involve an inventive step either.
It belongs to the general knowledge of a person working in the field of food cooking processes that essential and thorough consideration should be given to the mortality rate of bacterial content in the cooked food and that this can be done by using the sterilisation effect F. This general knowledge is illustrated by E11.

The fact that document E11 describes in its examples and embodiments the sterilisation of tins does not render it irrelevant for illustrating the general knowledge of the skilled person since it concerns the same issue, namely the sanitary safety of food with regard to the reduction of its bacterial content. Such a general knowledge is of course to be applied to other food treatment processes and thus quite obviously also to cooking processes in a food cooking oven.

4.6 The method of claim 1 of auxiliary request 3 thus lacks inventive step in the meaning of Article 56 EPC.

5. Auxiliary request 5

Claim 1 of auxiliary request 5 is based on the combination of claim 1 of auxiliary request 1 with additional features based on dependent claim 2 as granted. The additional features read:

"the food cooking oven being provided with selector means (5,6) that are adapted to classify the food being cooked according to pre-defined categories (A,B) and to send a multiplicity of predefined values (F0, F1, F2 ... Fn), depending on the selected category, towards said processing and control device, which is in turn adapted to perform a comparison of such worked-out value of F with said values (F0, F1, F2 ... Fn) and to issue respective signals (UNSAFE, SAFE-0, SAFE-1,...) corresponding to the outcome of said comparison, towards appropriate indicator or display means (7)."

5.1 As for claim 1 of auxiliary request 3 above, the board considers that the meaning of the additional features is relatively general and broad since the claimed features expressed as "predefined values" and "worked-

out value of F with said values" are not defined further.

Again, in the absence of additional limiting features which would give substance to the expressions "predefined values" and "worked-out value of F with said values", claim 1 is to be considered in general terms. The additional features fall under the disclosure of E12 for the following reasons.

Paragraph [0025] of E12 discloses a means that is adapted to classify the food being cooked according to pre-defined categories and to transmit a plurality of predefined values (safety temperature T_s , period of time D) depending on the selected category towards the processing and control device. The processing and control device in turn is adapted to perform a comparison of a calculated value of T_c (core temperature) and t (time) with predetermined values, and then to issue optical or sound signals (see paragraph [0083]) corresponding to the outcome of the comparison towards an appropriate indicator or display means.

- 5.2 If, as argued by the respondent, the values defined in claim 1 were to be interpreted in a very limited way, namely for the function F of the sterilisation effect as defined in pages 3 and 4 of the description, the claimed method would not involve an inventive step either for similar reasons as those considered for auxiliary request 3 above.

Using the sterilisation effect or mortality rate function F , which belongs to the general knowledge of a person working in the field of food cooking processes, one would set predefined values of F and compare them with the monitored values based on detected temperature

and cooking time, as already established paragraph 4.5 above.

5.3 The method of claim 1 of auxiliary request 5 thus lacks inventive step in the meaning of Article 56 EPC.

Order

For these reasons it is decided that:

The decision under appeal is set aside.
The patent is revoked.

The Registrar:

The Chairman:



C. Spira

G. Ashley

Decision electronically authenticated