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**Datasheet for the decision  
of 3 December 2019**

**Case Number:** T 1279/15 - 3.2.07

**Application Number:** 09796130.4

**Publication Number:** 2367741

**IPC:** B65D85/804, A47J31/36

**Language of the proceedings:** EN

**Title of invention:**

CAPSULE, SYSTEM AND METHOD FOR THE PREPARATION OF A BEVERAGE  
AND A METHOD FOR MANUFACTURING SUCH A CAPSULE

**Patent Proprietor:**

Koninklijke Douwe Egberts B.V.

**Opponents:**

Krüger GmbH & Co. KG  
Société des Produits Nestlé S.A.

**Headword:**

**Relevant legal provisions:**

EPC Art. 100(b), 100(a), 54, 56

**Keyword:**

Grounds for opposition - insufficiency of disclosure (no)

Novelty - (yes)

Inventive step - (yes)

**Decisions cited:**

T 0063/06

**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 1279/15 - 3.2.07

**D E C I S I O N**  
**of Technical Board of Appeal 3.2.07**  
**of 3 December 2019**

**Appellant:** Koninklijke Douwe Egberts B.V.  
(Patent Proprietor) Vleutensevaart 35  
3532 AD Utrecht (NL)

**Representative:** V.O.  
P.O. Box 87930  
2508 DH Den Haag (NL)

**Respondent 01:** Krüger GmbH & Co. KG  
(Opponent 1) Senefelderstr. 44  
51469 BERGISCH GLADBACH (DE)

**Representative:** Loock, Jan Pieter  
Kutzenberger Wolff & Partner  
Waidmarkt 11  
50676 Köln (DE)

**Respondent 02:** Société des Produits Nestlé S.A.  
(Opponent 2) Avenue Nestlé 55  
1800 Vevey (CH)

**Representative:** Cronin, Brian Harold John  
Cronin Intellectual Property  
Chemin de la Vuarpillière 29  
1260 Nyon (CH)

**Decision under appeal:**      **Decision of the Opposition Division of the  
European Patent Office posted on 20 April 2015  
revoking European patent No. 2367741 pursuant to  
Article 101(3) (b) EPC.**

**Composition of the Board:**

**Chairman**            I. Beckedorf  
**Members:**            K. Poalas  
                          A. Pieracci

## **Summary of Facts and Submissions**

- I. The appellant (patent proprietor) lodged an appeal against the decision of the opposition division revoking the European patent No. 2 367 741.
  
- II. Three oppositions had been filed against the patent as a whole based on Article 100(a) and (b) EPC (lack of novelty and inventive step, insufficiency of disclosure).
  
- III. The opposition division held  
  
that the ground for opposition according to Article 100(b) EPC is unfounded,  
that the subject-matter of claim 1 of the patent as granted is novel and  
that the subject-matter of claim 1 of the patent as granted does not involve an inventive step over the teaching of D1.
  
- IV. With the statement setting out the grounds of appeal, the patent proprietor requested  
  
that the decision under appeal be set aside  
and  
that the patent be maintained as granted (main request)  
or, in the alternative,  
that the patent be maintained in amended form according to one of the twelve auxiliary requests filed together with the statement setting out the grounds of appeal.

V. With their replies to the statement setting out the grounds of appeal respondent 01 and respondent 02 (opponent 01 and opponent 02) requested

that the appeal be dismissed.

Opponent 03 withdrew its opposition with letter dated 28 April 2016 and is no more party to the present appeal proceedings.

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

D1: EP 0 844 195 A;

D12: Extract from ISO 13330, Particle size analysis - Laser diffraction methods, corrected version 2009-12-01 (page 15);

D13: Quality Audit Standard QAS3001-B Measurement Protocols, Malvern Mastersizer S;

E22: Declaration of Olivier Nicolet, 6 February 2015;

E24: Pages 207-228, Chapter 10, from the publication "Nonwovens - Theory, Process, Performance & Testing", published in 1993;

E25: Operating instructions of the Rodos, Sympatec system;

E26: An application note from Malvern;

E27: Section 5.3 of the book "Espresso Coffee, The science of quality", first published 1995;

E28: Handbook of nonwoven filter media, first edition 2007.

VII. To prepare the oral proceedings scheduled upon all parties' requests, the Board communicated its preliminary assessment of the case to the parties by means of a communication pursuant to Article 15(1) RPBA 2007. The Board expressed therein its preliminary

opinion that the patent proprietor's appeal appeared to be well-founded on the basis of the patent as granted and to which both opponents responded by letters dated 31 October 2019 (opponent 01) and 9 October 2019 (opponent 02) with arguments in respect of the grounds for opposition under Articles 100(a) and 56 EPC (both opponents) and under Articles 100(b) and 83 EPC (opponent 02).

VIII. Oral proceedings before the Board took place on 3 December 2019. For further details on the course of the oral proceedings, in particular the matters discussed with the appellant, reference is made to the minutes thereof.

The decision of the Board was announced at the end of the oral proceedings.

IX. The lines of argument of the parties are substantially as follows and they are dealt with in detail in the reasons for the decision.

The patent proprietor concurs with the finding of the impugned decision that the claimed invention is sufficiently disclosed and that the subject-matter of claim 1 is novel over the teaching of D1. However, the patent proprietor argues that the subject-matter of claim 1 involves an inventive step in view of the teaching of D1 in combination with the common general technical knowledge of the person skilled in the art.

The two opponents concur with the impugned decision as far it concerns its finding that the subject-matter of claim 1 does not involve an inventive step in view of the teaching of D1 in combination with the common general technical knowledge of the person skilled in

the art. However, they argue that the claimed invention is not sufficiently disclosed and that the subject-matter of claim 1 is not novel over the teaching of D1.

X. The independent claims according to the patent as granted read as follows:

"1. Capsule for preparing a predetermined quantity of beverage suitable for consumption using an extractable product, for instance roast and ground coffee, comprising a circumferential first wall, a second wall closing the circumferential first wall at a first end, a perforated and/or porous third wall closing the circumferential first wall at a second, open end opposite the second wall arranged for draining the prepared beverage from the capsule, wherein the first, second and third wall enclose an inner space comprising the extractable product, characterized in that the extractable product in the inner space has particles falling within a preselected distribution by weight, wherein a 10<sup>th</sup> percentile of the particle size is 20-60 µm, preferably smaller than 40 µm wherein a 50<sup>th</sup> percentile of the particle size is 400-600 µm, preferably 450-550 µm and wherein a 90<sup>th</sup> percentile of the particle size is 700-1000 µm, preferably 825-950µm."

"15. Method for manufacturing a capsule according to any one of the preceding claims, wherein the method comprises:

- providing a coffee receiving cup comprising the circumferential first wall and one of the second and third wall defining an inner space arranged for accommodating roast and ground coffee which has particles falling within a preselected distribution by weight, wherein a 10<sup>th</sup> percentile of the particle size



is 20–60  $\mu\text{m}$ , preferably smaller than 40  $\mu\text{m}$  wherein a 50<sup>th</sup> percentile of the particle size is 400–600  $\mu\text{m}$ , preferably 450–550  $\mu\text{m}$  and wherein a 90<sup>th</sup> percentile of the particle size is 700–1000  $\mu\text{m}$ , preferably 825–950 $\mu\text{m}$ ;  
- providing an amount of said roast and ground coffee in the inner space of the coffee receiving cup."

"26. System for preparing a predetermined quantity of beverage suitable for consumption using an extractable product, the system comprising:  
and an exchangeable capsule according to any one of claims 1-14 and an apparatus comprising:  
a fluid dispensing device for supplying an amount of fluid, such as water under a high pressure to the exchangeable capsule,  
a receptacle for holding the exchangeable capsule and an outlet which, in use is in fluid communication with the capsule for draining the prepared beverage from the capsule and supplying the beverage to a container such as a cup."

"28. Method for preparing a predetermined quantity of beverage suitable for consumption using an extractable product, for instance roast and ground coffee, comprising:  
providing an exchangeable capsule according to any one of claims 1-14,  
providing an apparatus comprising a receptacle for holding the exchangeable capsule, a fluid dispensing device for supplying an amount of fluid, such as water, under a pressure of at least six bars to the exchangeable capsule, and an outlet which, in use is in fluid communication with the capsule for draining the prepared beverage from the capsule and supplying the beverage to a container such as a cup;  
arranging the exchangeable capsule in the receptacle;

supplying the fluid under pressure to the compacted extractable product for preparing the beverage thereby redistributing relatively small coffee particles in the inner space of the capsule such that said coffee particles are located adjacent the exit filter and together with the exit filter provide a flow restriction of the capsule."

## Reasons for the Decision

### *Preliminary remark*

Any reference to claims in the reasons for the decision concerns the claims of the patent as granted.

### 1. *Sufficiency of disclosure - Article 100(b) EPC*

- 1.1 It is undisputed that claim 1 details the particle size distribution to be such that:  
the 10<sup>th</sup> percentile ( $X_{10}$ ) is 20-60  $\mu\text{m}$ , *i.e.* 10% of the particles has a size of 20-60  $\mu\text{m}$  or less;  
the 50<sup>th</sup> percentile ( $X_{50}$ ) is 400-600  $\mu\text{m}$ , *i.e.* 50% of the particles has a size of 400-600  $\mu\text{m}$  or less; and the 90<sup>th</sup> percentile ( $X_{90}$ ) of 700-1000  $\mu\text{m}$ , *i.e.* 90% of the particles has a size of 700-1000  $\mu\text{m}$  or less.

### *Claim 1*

- 1.2 Opponent 02 argues not only that the present invention is not sufficiently disclosed but also that in the present case the patent proprietor bears the burden of proving sufficiency of disclosure. Said last argument is based on T 63/06 (not published in the OJ EPO) stating that, although the opponent generally bears the burden of proving insufficiency of disclosure, in a case where the patent **does not give any information** as

to how a feature of the invention can be put into practice, it is then up to the patent proprietor to prove the contrary, *i.e.* that the skilled person's common general knowledge would enable him to carry out the invention.

- 1.3 The Board does not agree. In the present case the patent clearly identifies in paragraph 13 that preferential particle size distribution according to the invention is determined by means of a commonly known Sympatec/Helos analyzer using a R7 lens suitable for determining particle distribution and size in dry product, whereby, if needed, the de-agglomeration of stacked together particles takes place due to a dry dispersion system Rodos T4.1 unit. Accordingly, the precondition mentioned in T 63/06 for shifting the burden of proof from the opponent to the patent proprietor, namely that the patent **does not give any information** as to how the claimed particle size ranges can be put into practice, *i.e.* can be defined, is not met in the present case. For this reason, it is in the present case still the opponent(s) bearing the burden of proving insufficiency of disclosure.
- 1.4 For the present invention the question concerning sufficiency of disclosure is therefore whether it would be possible without undue burden for the person skilled in the art to provide a capsule having in its inner space particles having the recited particle size distribution based on the information provided in the patent in suit and on the common general technical knowledge.
- 1.5 Opponent 02, based on E22, argues that is not possible to reproduce a roasted and ground coffee sample having a preselected distribution by weight as claimed in

claim 1 without knowing the dispersion pressure used to characterize the original sample.

- 1.6 The Board notes that there is no doubt, as also shown by E22, that different dispersion pressure values in the Rodos dispersion tool result to different measured  $X_{10}$ ,  $X_{50}$  and  $X_{90}$  - values. On the other hand, the Board considers that the person skilled in the art based on its experience with this dispersion system, see hereto also the operating instructions according to E25, section 3.3.2, would select according to the degree of agglomeration of the particles the appropriate dispersion pressure value in order to achieve the required de-agglomeration.
- 1.7 There is further no doubt, that a skilled person is perfectly capable of providing a capsule comprising a loose extractable product with the particle size distribution as recited in claim 1. In case the particle size distribution of a compressed extractable product is to be defined the Board notes the following.
- 1.8 The skilled person starting from a specific quantity (for example 5 g) of a loose extractable product (having an initial particle size distribution according to claim 1) to be used in a capsule for preparing a predetermined quantity of beverage suitable for consumption, said extractable product being roast and ground coffee or not, and consequently compressing said amount with a specific pressure, is in position to determine  $X_{10}$ ,  $X_{50}$  and  $X_{90}$  - values for said quantity of loose extractable product and for said specific compressive stress by using the Sympatec/Helos/Rodos - system referred to in paragraph 13 of the patent in suit. In case the determined  $X_{10}$ ,  $X_{50}$  and  $X_{90}$  - values of the compressed product after de-agglomeration

correspond to the ones according to claim 1 a capsule disclosing such an extractable product satisfies particle size distribution according to claim 1. If not, the skilled person would vary the original particle size distribution of the loose extractable product so that  $X_{10}$ ,  $X_{50}$  and  $X_{90}$  - values of the compressed product after de-agglomeration correspond to the ones according to claim 1 for the same compressive pressure.

Almost every measurement device must be set to the proper settings for performing a meaningful measurement, see D1, E26 and E27, section 5.3.3.

1.9 The Board considers that through a reasonable amount of trial and error exercises concerning the initial particle size distribution of a loose extractable product for a specific compression pressure the skilled person would arrive at  $X_{10}$ ,  $X_{50}$  and  $X_{90}$  - values of the compressed product after de-agglomeration corresponding to the ones according to claim 1 without undue burden. Convincing arguments to the contrary have not been put forward by opponent 02 who, thus, has not discharged its burden of proof to show that the claimed invention is not sufficiently disclosed, see point 1.3 above.

1.10 The fact that claim 1 covers both non-compacted particles and compacted particles is of no relevance in view of Article 83 EPC. Both the non-compacted particles or the compacted particles have to fulfill the requirements as set out in claim 1 when they are inside the capsule. Therefore, the skilled person is in a position to provide a capsule comprising a compacted or non-compacted extractable product with the particle size distribution as recited in claim 1.

- 1.11 Opponent 02 argues further that the particle size distribution  $X_{10}$ ,  $X_{50}$  and  $X_{90}$  - values being an important parameter of claim 1 are not clearly and unambiguously established according to the patent's teaching, so that it cannot be determined whether or not prior art teachings and whether or not competitive activities fall under said claim.
- 1.12 The Board concurs in this respect with the predominant opinion among the Boards that the definition of the "forbidden area" of a claim should not be considered as a matter related to Articles 83 and 100(b) EPC and that the skilled person's ability to establish whether or not subject-matter falls within the claimed scope is a requirement for clarity and not for sufficient disclosure (see Case Law of the Boards of Appeal, 9th edition 2019, II.C.8.2). The above-mentioned opponent 02's objections were concerned with the precise scope of protection conferred and so, in fact, clarity objections. Accordingly, said objections do not support the alleged insufficiency of disclosure.
- 1.13 The Board follows further the patent proprietor's argument that once the particle size distribution for the loose extractable product is defined through routine experimentation, see point 1.8 above, it makes no difference how the size distribution is obtained. This could be by blending batches of different grind sizes, hand picking particles, or a dedicated grinding process that delivers the desired distribution in a single step.
- 1.14 The "preselected" distribution according to claim 1 are the  $X_{10}$ ,  $X_{50}$  and  $X_{90}$  - values of claim 1 referring to compressed and uncompressed products. Such a distribution for a compressed product is defined via

routine experimentation, see point 1.8 above.

- 1.15 Opponent 02 does not provide any evidence for the allegation that for the same initial particle size distribution of loose extractable product undergone a specific compression pressure the Sympatec/Helos/Rodos-measurement proposed in the patent in suit does not provide consistent results. The fact that a different measurement method may provide (minor) variations in the results cannot question the sufficiency of the disclosure.
- 1.16 Therefore, the Board, not being persuaded by the opponents' arguments to the contrary, has no reason to doubt that a skilled person is capable of providing a capsule comprising an extractable product with the particle size distribution  $X_{10}$ ,  $X_{50}$  and  $X_{90}$  - values as recited in claim 1. The opponents' argument do not persuade the Board

*Claim 8*

- 1.17 Under point 7.16 of its above-mentioned communication pursuant to Article 15(1) RPBA 2007 the Board stated the following:

*"According to claim 8, which refers back to claim 7, an exit filter according to claim 1 being inter alia formed by a non-woven sheet comprises 80 to 140 exit openings, wherein an opening diameter is within a specific range. Contrary to the arguments put forward by opponent 2 based on E24 and E28, the Board cannot see any reason why a non-woven sheet may not comprise (at least) 80 to 140 exit openings, wherein a (one) opening diameter lies within the claimed specific range.*

*Accordingly, the subject-matter of claim 8 cannot be considered as being insufficiently disclosed".*

1.18 The above-mentioned preliminary finding of the Board has not been commented on nor has it been contested by the opponents during the appeal proceedings.

1.19 Under these circumstances, the Board - having once again taken into consideration all the relevant aspects concerning said issue - sees no reason to deviate from its above-mentioned finding.

1.20 As a consequence, the subject-matter of claim 8 cannot be considered as being insufficiently disclosed.

*Claim 19*

1.21 The opponents argue that claim 19 and paragraph 36 of the patent in suit specify compression at a "pressure" of substantially 50-800 N. However, N (=Newton) is a measure of force, not of pressure. As the description and claims do not specify over which area the force is applied, the skilled person is left guessing as to the required area and cannot implement the feature of claim 19.

1.22 The Board does not agree. Given that N is a measure of force, it is obvious to the person skilled in the art that the compression ranges mentioned in claim 19 and in paragraph 36 of the patent in suit refer to compression forces (see column 14, line 51 and column 15, lines 5 and 6 of the patent in suit). Therefore, the term "pressure" in claim 19 and in paragraph 36 of the patent in suit is to be seen as an obvious clerical



error.

1.23 Accordingly, the subject-matter of claim 19 cannot be considered as being insufficiently disclosed.

1.24 From the above the Board concludes, that the claimed invention is disclosed in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art and that the ground for opposition according to Article 100(b) EPC does not hold against the patent as granted.

2. *Claim 1 - Novelty (Articles 100(a) and 54 EPC)*

2.1 Under point 8 of its above-mentioned communication pursuant to Article 15(1) RPBA 2007 the Board stated the following:

*"8. As far as it concerns novelty of the subject-matter of claim 1 of the patent as granted the Board comments as follows:*

*8.1 The Board considers that claim 1, by its "comprising" wording, does not preclude the presence of water in the inner space, and that D1 has a porous "third" wall 14 that when perforated is arranged for draining the prepared beverage from the capsule as the wall 14, which prior to use is non-perforated but perforable, and is perforated and allows liquid to pass when the capsule is inserted in a coffee dispensing machine (see column 1, lines 10-12).*

*8.2 Accordingly, D1 seems to disclose a capsule according to preamble of claim 1.*

*8.3 The Board, in agreement with the patent proprietor*

and opponent 2, considers that a capsule having a grind size distribution of coffee particles ground in a Probat mill with  $X_{10} = 40 \mu\text{m}$ ,  $X_{50} = 380 \mu\text{m}$  and  $X_{90} = 700 \mu\text{m}$  according to figure 3 of D1 is to be considered as the closest prior art. It should be noted that in figure 3 the  $X_{10}$  value falls within the claimed range and the  $X_{90}$  value is identical with the claimed lower range boarder. The  $X_{50}$  value however, is below the corresponding claimed range.

8.4 Although it is to be acknowledged that depending on the measuring method, the measuring conditions, the quality of the extractable product and the degree of compression different adjustments taking account of said influencing parameters have to be taken into consideration by the test results (see E22, D12, D13), fact is, that the opponents were not in position to provide a directly and unambiguously derivable  $X_{50}$  value falling within the corresponding claimed range. The Board is not persuaded, that the tolerance values presented in the table on page 18 of the reply letter of opponent 2 are directly and unambiguously derivable from the documents present in the file or from the general technical knowledge of the person skilled in the art and are to be applied to the data derivable from figure 3 of D1.

8.5 For the above-mentioned reasons the subject-matter of claim 1 seems to be novel over the disclosure of D1".

2.2 The above-mentioned preliminary findings of the Board have not been commented on nor have they been contested by the opponents during the appeal proceedings.

2.3 Under these circumstances, the Board - having once again taken into consideration all the relevant aspects concerning said issue - sees no reason to deviate from its above-mentioned findings.

2.4 As a consequence, the subject-matter of claim 1 of the patent as granted is novel.

3. *Claim 1 - Inventive step (Articles 100(a) and 56 EPC)*

3.1 The Board, following the corresponding arguments of the patent proprietor, considers that in the impugned decision the opposition division not only did not evaluate correctly the teaching of D1 but that it also suffers from an error of fact for the following reasons.

*Teaching of D1*

3.2 D1 states in column 1, lines 34 - 50, that there are several coffee mills known in the prior art, whereby the most common mills are mills with rollers having axial grooves, like for example the Probat mill. Such a mill provides ground coffee with elevated numbers of fines (column 1, lines 34-42), as can also be seen in figure 3 (column 4, lines 1-9) of D1. As stated under point 2.1 above a grind size distribution line of coffee particles ground in a Probat mill having the values of  $X_{10} = 40 \mu\text{m}$ ,  $X_{50} = 380 \mu\text{m}$  and  $X_{90} = 700 \mu\text{m}$  is depicted in figure 3 of D1. The  $X_{10}$  value falls thereby within the claimed range, the  $X_{90}$  value is identical with the claimed lower range boarder and the  $X_{50}$  value lies below the corresponding claimed range.

3.3 D1 states further in column 1, lines 42 - 44, that it is the object of the invention according to D1 to

providing a ground coffee having a reduced number of fines.

3.4 In order to achieve the above-mentioned object, D1 teaches in column 1, lines 44 - 47, the use of mills with rollers having radial grooves, like for example the Matsubo mill. Such a mill provides ground coffee with reduced number of fines (column 1, lines 47 - 59), as can also be seen in figure 2 (column 3, lines 39 - 56) of D1. A grind size distribution line of coffee particles ground in a Matsubo mill having the values of  $X_{10} = 70 \mu\text{m}$ ,  $X_{50} = 390 \mu\text{m}$  and  $X_{90} = 670 \mu\text{m}$  is depicted in figure 2 of D1, whereby all said values lie outside the corresponding ranges claimed in claim 1.

3.5 In this respect, the Board concurs with the patent proprietor (see page 8, last paragraph of the statement setting out the grounds of appeal) and with opponent 02 (see page 14, sixth complete paragraph of its reply to the statement with the grounds of appeal) that the opposition division in its decision made an error of fact in presenting a wrong value for  $X_{10}$  (50  $\mu\text{m}$  in place of 70  $\mu\text{m}$ ) for the distribution curve of figure 2 of D1, *i.e.* for what it considered as defining the closest prior art. Therefore, the Board considers the corresponding lack of inventive step argumentation in the impugned decision unsupportable for this error of fact.

*Problem-solution-approach*

3.6 In view of the above, the issue at stake concerning inventive step is to assess whether the skilled person starting from a capsule having a coffee particle distribution according to figure 3 of D1 (such capsule representing the closest art according to all parties

in the appeal proceedings) and seeking to reduce the number of fines (representing the problem to be solved according to all parties in the appeal proceedings), would arrive at the capsule according to claim 1 without the exercise of an inventive activity.

3.7 As stated under points 3.2 to 3.4 above, D1 teaches the skilled person starting from a capsule having a coffee particle distribution according to figure 3 of D1 and seeking to reduce the number of fines to use mills with rollers having radial grooves, like for example the Matsubo mill in order to provide a coffee particle distribution according to figure 2 of D1, whereby the  $X_{10}$ ,  $X_{50}$  and  $X_{90}$  - values lie outside the corresponding ranges claimed in claim 1. Accordingly, D1 teaches the skilled person seeking to reduce the number of fines in a ground coffee particle distribution not to use a mill with rollers having axial grooves, *i.e.* not to use a Probat mill, but to use in any case a mill with rollers having radial grooves, *i.e.* a Matsubo mill. There is no teaching in D1 to be found leading the skilled person into another direction.

3.8 The opponents argue that it would be obvious for the person skilled in the art seeking to reduce the number of fines in a capsule having a coffee particle distribution according to figure 3 of D1 to keep using a Probat mill trying thereby by routine modifications, as for example changing the calibration of said mill, to arrive thereby automatically at  $X_{10}$ ,  $X_{50}$  and  $X_{90}$  - values falling within the claimed corresponding value ranges. Furthermore, going from the Probat grind of D1's figure 3 to the claimed particle size distribution involves such a minimal change that it would be improper to attribute the technical effect of reduced fines in assessing the inventive step of claim 1 under

the problem-solution approach to such a minimal change of the particle size distribution.

- 3.9 The Board does not agree. The skilled person seeking to reduce the number of fines in a capsule having a coffee particle distribution according to figure 3 of D1 would not ignore the teaching of D1 and moreover, it would not go against the teaching of D1. The alternative particle size distribution proposed in figure 2 of D1 has all three claimed parameters amended at the same time, whereby **all** said parameters are **outside** the claimed ranges. For the  $X_{50}$  value only a **small increase** of 10  $\mu\text{m}$ , keeping still this parameter **outside** the corresponding claimed range, is proposed. Therefore, the skilled person seeking to reduce the number of fines and respecting the above-mentioned teaching of D1 would not arrive at a particle size distribution having the three claimed parameters falling within the claimed ranges without the exercise of an inventive activity.
- 3.10 Furthermore, since D1 clearly teaches the use of a mill having rollers with radial grooves, *i.e.* the use of a Matsubo mill instead of using a mill having rollers with axial grooves, *i.e.* instead of a Probat mill, the opponents' argument that the skilled person seeking to solve the above-mentioned problem and based on the teaching of D1 would use a Probat mill and would start optimising the working conditions of said mill does not persuade the Board, since such an approach would go clearly against said teaching of D1.
- 3.11 Further, the opponents' argument that the fact that the shifting to the right of the Probat distribution curve of D1's figure 3 to the claimed particle size distribution involves such a minimal change implies that such a minimal shifting of the distribution curve

does not have any technical effect, cannot be followed by the Board. The Board considers the above-mentioned opponents' argument which was not supported with any kind of facts or evidence as an unsubstantiated allegation which does not need to be taken into consideration by the assessment of inventive step.

- 3.12 Opponent 02 filed during the oral proceedings, *i.e.* for the first time in the present opposition-appeal-proceedings, annex A disclosing a copy of figure 3 of D1 and an amended figure 3 showing an "expected untruncated curve after 1000  $\mu\text{m}$ " drawn by opponent 02. Annex A was presented in order to allegedly show the incorrectness of the distribution curve depicted in figure 3 of D1. Given that all parties, including opponent 02, considered figure 3 of D1 as representing the closest prior art, that the added part of the distribution curve of figure 3 after 1000  $\mu\text{m}$  was drawn arbitrarily by opponent 02 and that questioning at such a late stage of the proceedings the correctness of the curve of figure 3 puts in doubt whether said distribution curve and its  $X_{10}$ ,  $X_{50}$  and  $X_{90}$  - values are correctly evaluated as representing the closest prior art, the Board considers the opponent 02's arguments based on an arbitrarily "corrected" course of the distribution curve according to annex A as an unsubstantiated allegation which does not need to be taken into consideration by the assessment of inventive step. Furthermore, the Board considers that the opponent 02's arguments based on annex A allegedly showing the "corrected" distribution curve depicted in figure 3 of D1 do not support the opponents' lack of inventive step attack starting from the distribution curve of figure 3 of D1 as representing the closest prior art, since it does not provide new, amended  $X_{10}$ ,

$X_{50}$  and  $X_{90}$  - values.

3.13 Opponent 01 argues further that the skilled person seeking to solve the above-mentioned problem would use a Probat mill with further optimised or even with the same milling conditions and would arrive automatically at the claimed invention due to the error of measurement inherent in any measurement of ground coffee particles distribution. Such error of measurement would automatically shift the distribution curve of figure 3 of D1 to the right so that the  $X_{10}$ ,  $X_{50}$  and  $X_{90}$  - values of such a measured curve would fall within the claimed value ranges.

3.14 This argument does not persuade the Board. Firstly, a further using of Probat mill would clearly go against the teaching of D1, said last proposing the use of a Matsubo mill. Secondly, opponent 01 did not provide any fact or evidence for its allegation that the shifting of the distribution curve of figure 3 of D1 due to the error of measurement would be such that the new distribution curve would automatically have  $X_{10}$ ,  $X_{50}$  and  $X_{90}$  - values falling within the claimed value ranges. The Board considers therefore the above-mentioned opponent 01' argument as an unsubstantiated allegation which does not need to be taken into consideration by the assessment of inventive step.

3.15 For the above-mentioned reasons, the Board concludes that the subject-matter of claim 1 involves inventive step.

4. *Independent claims 15, 26 and 28*

Since each of the independent claims 15, 26 and 28 refers to claim 1, the above-mentioned Board's findings



concerning novelty and inventive step of the subject-matter of claim 1 are also applicable to the subject-matters of said claims.

5. Since the patent proprietor convincingly demonstrated the incorrectness of the decision under appeal in respect of the issue of inventive step of the claimed subject-matter and because none of the opponents' objections to the patent as granted submitted by them and discussed above is considered persuasive, the Board finds that the decision under appeal is to be set aside and that the patent is to be maintained unamended as granted.

## **Order**

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

- 1. The decision under appeal is set aside.**
- 2. The patent is maintained as granted.**

The Registrar:

The Chairman:



G. Nachtigall

I. Beckedorf

Decision electronically authenticated