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# Datasheet for the decision of 8 March 2022

Case Number: T 0351/18 - 3.3.09

11807810.4 Application Number:

Publication Number: 2651237

IPC: A23F5/40

Language of the proceedings: ΕN

#### Title of invention:

INSTANT COFFEE

# Patent Proprietor:

Koninklijke Douwe Egberts B.V.

#### Opponent:

Strehlke, Ingo Kurt

#### Headword:

Instant Coffee/DOUWE EGBERTS

# Relevant legal provisions:

EPC Art. 100(a), 100(b), 100(c), 54(2), 56

# Keyword:

Grounds for opposition - added subject-matter (no)
Sufficiency of disclosure - (yes) - support by the description (yes)
Novelty - (yes) - prior disclosure - implicit features (no)
Inventive step - (yes) - closest prior art - non-obvious solution

# Decisions cited:

T 0593/09, T 0923/13, T 0626/14



# Beschwerdekammern Boards of Appeal Chambres de recours

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Case Number: T 0351/18 - 3.3.09

D E C I S I O N
of Technical Board of Appeal 3.3.09
of 8 March 2022

Appellant: Koninklijke Douwe Egberts B.V.

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Decision under appeal: Interlocutory decision of the Opposition

Division of the European Patent Office posted on 8 December 2017 concerning maintenance of the European Patent No. 2651237 in amended form.

# Composition of the Board:

Chairman A. Haderlein Members: F. Rinaldi

F. Blumer

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# Summary of Facts and Submissions

- I. This decision concerns the appeals filed by the patent proprietor and the opponent against the interlocutory decision of the opposition division that European patent No. 2 651 237 as amended complied with the requirements of the EPC.
- II. Both parties to the opposition proceedings appealed the decision. For simplicity, the parties will be referred to by their party positions before the opposition division.
- III. In the notice of opposition, the opponent had requested that the patent be revoked under Articles 100(a) (lack of novelty and inventive step), 100(b) and 100(c) EPC.
- IV. The opponent referred to these documents on appeal:

**D1:** EP 2 100 514 A1

**D2:** EP 0 928 561 A1

**D3:** WO 2010/116138 A1

**D5:** US 2011/0183048 A1

**D6:** US 2006/0040038 A1

**D7:** US 4,594,256

**D8:** US 3,261,689

**D9:** US 3,767,419

**D10:** US 3,652,292

**D11:** US 3,716,373

**D12:** US 3,821,430

**D13:** US 2008/0160139 A1

**D14:** US 3,740,232

**D15:** US 3,554,760

**D16:** US 3,729,327

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D17: US 3,514,300 D18: US 3,695,165 D19: US 4,724,620 D20: US 3,485,637 D21: US 3,227,558

D22: Encyclopedia of Food Science and Technology, 1992, Vol. 1, pp. 13-17

D23: Powder Technology, 1996, Vol. 86, pp. 49-57

D24: Food Control, 1995, Vol. 6, pp. 95-100

**D25a:** EP 2 436 269 A1

**D25b:** RU 2 400 098 C1 (German translation)

**D26:** US 3,421,906

**D27:** US 2003/0026883 A1

**D28:** US 3,511,666 **D29:** US 2,889,226

D31: USPTO office action, application No. 13/994,913, mail date: 08/12/2015

D32a: WO 91/18517 A1
D32b: EP 0 532 631 B1
D33: DE 197 00 084 A1
D34: WO 96/24255 A1
D35: EP 0 220 889 A2

D36: US 4,565,706

D37: GB 2 022 394 A

D38: US 3,482,990

D39: US 3,697,288

D40: DE 28 46 515 A1

D25b is prior art under Article 54(2) EPC. D25a claims priority from the patent application on which D25b is based. D25a was published after the priority date claimed in the patent in suit. Nevertheless, the parties used D25a as a prior-art document and D25a and D25b as equivalent documents throughout the opposition and appeal proceedings.

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- V. In the decision under appeal, the opposition division decided with respect to claim 1 as granted that the patent did not disclose the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art. However, the new first auxiliary request filed at the oral proceedings, which included claim 3 as granted, was found to be allowable.
- VI. On appeal, the patent proprietor filed eight auxiliary requests (first to eighth).
- VII. Relevant for this decision are only the claims as granted (main request). Claims 1 and 3 read as follows:
  - "1. An instant coffee composition comprising soluble coffee particles having internal pores, wherein at least some of the internal pores contain a pressurised gas, and wherein the soluble coffee particles are provided with added finely-ground insoluble coffee material on an outer surface thereof, wherein the finely-ground insoluble coffee material has a mean particle size of from 0.1 to 100 micrometers."
  - "3. A method of forming the instant coffee composition of claim 1 or claim 2, the method comprising;
  - a) providing a soluble coffee particle having an outer surface and internal pores;
  - b) at least partially coating the outer surface of the soluble coffee particle with an added finely-ground insoluble coffee material to form a coated particle, wherein the finely-ground insoluble coffee material has a mean particle size of from 0.1 to 100 micrometers; and

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- c) warming the coated particle and subjecting it to a pressurised gas so that at least some of the gas is trapped in said internal pores of the particle."
- VIII. The opponent's arguments relevant to the decision may be summarised as follows.
  - Claims 1 and 3 involved subject-matter extending beyond the content of the application as filed. The issues in question were the feature "added" and the mean particle size. Moreover, claims 2, 9 and 11 as granted were based on combinations of dependent claims not disclosed in the application as filed.
  - The invention was not sufficiently disclosed because:
    - the claims were broad
    - it was difficult to establish the scope of the claims
    - there were doubts that the invention was enabled over the entire scope of the claims
    - the claimed products were not distinguishable from prior-art products
    - the patent disclosed no methods for measuring parameters ("mean particle size" and "pressurised")

Moreover, the claims involved ill-defined parameters.

- The subject-matter of claim 1 lacked novelty over D6, D25a/D25b, D32a/D32b, D34, D37, D39 and D40.
- The subject-matter of claims 1 and 3 lacked inventive step. The closest prior art included the documents D6 and D25a/D25b. The technical problem was to provide an alternative composition.
- IX. The patent proprietor's arguments relevant to the decision may be summarised as follows.

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- None of the patent's claims involved subject-matter extending beyond the content of the application as filed.
- The invention was sufficiently disclosed. The opponent's objections related to clarity, not to the requirements set out in Article 83 EPC. To carry out the invention, the skilled person would consult the patent specification and D6, which was explicitly mentioned in it. The skilled person would use common general knowledge to determine whether pressurised gas is trapped in the internal pores of the soluble coffee particle.
- None of D6, D25a/D25b, D32a/D32b, D34, D37, D39 and D40 disclosed the subject-matter of claim 1.
- The subject-matter of claims 1 and 3 involved an inventive step. The closest prior art was D6. The technical problem was to provide an instant coffee beverage with a more stable foam.

# X. Final requests

The patent proprietor requested that the decision under appeal be set aside and that the patent be maintained as granted (main request) or, alternatively, on the basis of one of the first to eighth auxiliary requests, all filed with its reply to the opponent's grounds of appeal.

The opponent requested that the decision under appeal be set aside and that European patent No. 2 651 237 be revoked in its entirety.

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# Reasons for the Decision

- 1. The patent relates to an instant coffee composition comprising soluble coffee particles having internal pores. At least some of the internal pores contain a pressurised gas. Upon reconstitution with hot water, gas is released from the soluble coffee particles. The gas generates a foam layer on the beverage surface. The finely-ground insoluble coffee material provides an improved foam.
- 2. Ground for opposition under Article 100(c) EPC
- 2.1 The opponent argued that claims 1, 2, 3, 9 and 11 involved subject-matter extending beyond the content of the application as filed.
- 2.2 The term "added"
- 2.2.1 Claims 1 and 3 as granted refer to an added finelyground insoluble coffee material. The term "added" was not in the wording of respective product claim 1 and method claim 5 of the application as filed.
- 2.2.2 The opponent argued that claims 1 and 3 as granted involved subject-matter extending beyond the content of the application as filed. In its view, the term "added" was disclosed in the application as filed only in the context of specific coffee material or method steps.
- 2.2.3 This is incorrect.
- 2.2.4 On page 5, lines 15 to 19 of the application as filed, the following is disclosed:

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"The finely-ground coffee material added to the instant coffee particles may be any suitable coffee product, precursor, component, or by-product of the roast coffee or soluble coffee process, for example, finely-ground dried exhausted roast and ground coffee by-products from soluble coffee extraction, or pressed roast coffee beans which are finely-ground and optionally dried."

- 2.2.5 The skilled person directly and unambiguously understands from this passage that the finely-ground (insoluble) coffee material is added to the (soluble) instant coffee particle. There is no restriction on the type of finely-ground insoluble coffee material that is used. Nor is there disclosure that the finely-ground insoluble coffee material is added in a specified process step.
- 2.2.6 The application as filed sets out some preferred embodiments of finely-ground insoluble coffee material and how it is associated with the soluble coffee particle (e.g. pages 7 and 9). However, none of these embodiments is in contradiction with the generic disclosure of page 5.
- 2.2.7 Moreover, the term "added" merely sets out explicitly what the application as filed implicitly discloses to the skilled person. It is straightforward that the finely-ground insoluble coffee material is not only an impurity accidentally associated with the soluble coffee particle. It is an added ingredient. The opposition division is correct that the term "added" is "merely a clarification of what had originally been intended" or, more precisely, what is implicitly disclosed to the skilled person.

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- 2.2.8 To conclude, the term "added" does not involve subjectmatter extending beyond the content of the application as filed.
- 2.3 The mean particle size
- 2.3.1 Claims 1 and 3 as granted call for an added finely-ground insoluble coffee material which has a mean particle size of from 0.1 to 100 micrometres. No particle size is disclosed in respective product claim 1 and method claim 5 of the application as filed.
- 2.3.2 The opponent argued that the combination of the mean particle size and the term "added" involved subject-matter extending beyond the content of the application as filed. Moreover, the mean particle size was not disclosed in conjunction with the product of claim 1.
- 2.3.3 This is incorrect.
- 2.3.4 The feature of the mean particle size feature is disclosed in the application as filed on page 6, lines 4 and 5 and in claim 3, which is dependent on product claim 1. The skilled person would directly and unambiguously understand from these two passages that the mean particle size further characterises the finely-ground insoluble coffee material added to the soluble coffee particles. This concerns both the product and the method claim.
- 2.3.5 Therefore, this amendment, even when read in combination with the feature "added", does not extend beyond the content of the application as filed.
- 2.3.6 At the oral proceedings, the opponent argued as follows.

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- The mean particle size was disclosed in the application as filed only in conjunction with the finely-ground insoluble coffee material before it is added to the soluble coffee particle.
- In the product obtained (i.e. the product of claim 1 as granted), after the finely-ground insoluble coffee material was added to the soluble coffee particle, the mean particle size changed.
- This was disclosed on page 4 of the application as filed.
- Therefore, the mean particle size disclosed in claim 1 had no basis in the application as filed.
- 2.3.7 First, as explained above, the mean particle size is disclosed in conjunction with the product, in claim 3 of the application as filed.
- 2.3.8 Second, the opponent's argument is based on the erroneous understanding that the finely-ground insoluble coffee material changes its size in the course of the manufacturing process leading to the product of claim 1 as granted. But there is no disclosure of such a change in the application as filed.
- 2.3.9 The passage on page 4 (lines 20 to 25) to which the opponent referred reads as follows:

"The finely-ground insoluble coffee material is preferably at least partly fused into the outer surface of the soluble coffee particles. That is, the material is held onto the surface, preferably by being sunk slightly into the surface. This can be achieved, for example, by compression or more preferably by heating the particles to or above their glass transition

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temperature before or after contacting the particles with the insoluble coffee material."

- 2.3.10 This passage simply sets out that the structure of the soluble coffee particle changes, e.g. it partially fuses at the surface. There is no disclosure that the mean particle size of the finely-ground insoluble coffee material changes.
- 2.3.11 Therefore, the feature of the mean particle size does not involve subject-matter extending beyond the content of the application as filed.
- 2.4 Combination of features: claims 2, 9 and 11 as granted
- 2.4.1 The opponent argued that combining several dependent claims of the application as filed into dependent claims 2, 9 and 11 as granted generated subject-matter extending beyond the content of the application as filed.
- 2.4.2 A combination of dependent claims may cause such a deficiency. However, it was the opponent's task to demonstrate that the specific combinations in question generated subject-matter not directly and unambiguously disclosed to the skilled person. It did not do so.
- 2.4.3 In view of this, it cannot be concluded that claims 2, 9 and 11 as granted involve subject-matter extending beyond the content of the application as filed.
- 2.5 To conclude, the ground for opposition under Article 100(c) EPC does not prejudice the maintenance of the patent as granted.

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- 3. Ground for opposition under Article 100(b) EPC
- 3.1 The opponent argued that the invention could not be carried out. This concerned claim 3 and in particular claim 1. It raised in essence the following objections.
  - The claims were broad.
  - It was difficult to establish the scope of the claims.
  - There were doubts that the invention was enabled over the entire scope of the claims.
  - The claimed products were not distinguishable from prior-art products.
  - The patent disclosed no methods for measuring parameters ("mean particle size" and "pressurised").

Moreover, the claims involved ill-defined parameters.

- 3.2 The opponent extensively described alleged difficulties that the skilled person would meet when carrying out the invention. However, it provided no (experimental) evidence demonstrating that any of the alleged difficulties would have prevented the skilled person from carrying out the invention.
- 3.3 Case Law of the Boards of Appeal (9th edition, 2019, Chapter II.C.6.6.4) states:
  - "according to more recent decisions, the concept of 'forbidden area' was rather associated with the scope of the claims, i.e. Art. 84 EPC, than with sufficiency of disclosure"
- 3.3.1 The board agrees with this approach.

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- 3.3.2 Therefore, the claims of the patent in suit may be broad, and it may be difficult to establish the scope of the claims. But this in itself is not sufficient to arrive at the conclusion that the invention is not sufficiently disclosed.
- 3.4 Instead, what is to be examined under
  Article 100(b) EPC is whether the European patent
  discloses the invention in a manner sufficiently clear
  and complete for it to be carried out by a person
  skilled in the art.
- 3.5 The patent specification describes how the invention works and what has to be done to obtain the claimed product.
- 3.5.1 In more detail, the specification sets out how to produce an instant coffee composition comprising soluble coffee particles having internal pores in which at least some of the internal pores contain a pressurised gas. Examples 1 and 2 disclose that spraydried coffee powder can be used as a starting product and the conditions (pressure and temperature) that can be applied to produce the instant coffee of the invention.
- 3.5.2 For further instructions, e.g. on how to trap pressurised gas, the patent refers in several passages (paragraphs [0003], [0031] and [0032]) to prior-art document D6. If the skilled person needed further teaching on how to carry out the invention, they would simply study its disclosure. D6 describes various methods for producing an instant dry beverage composition which comprises a soluble coffee having internal voids filled with pressurised gas.

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- 3.5.3 In sum, there is evidence that the invention can be carried out and that variations would be envisaged by the skilled person. By contrast, there is no evidence that it cannot be carried out in some specific area, as the opponent alleged. The opponent has also not shown that if the instructions in the patent, and in D6, are followed, products according to claim 1 cannot be obtained.
- 3.6 As regards the opponent's objection that the claimed products may not be distinguished from prior-art products, this is not an issue to be discussed in the context of sufficiency of disclosure. This point has to be decided with the respect to the specific disclosure of the piece of prior art under examination, as is done below in the context of novelty.
- 3.7 In its last written submission and at the oral proceedings, the opponent focused on the argument that claim 1 (and claim 3) involved ill-defined parameters.
- 3.7.1 In its view, the ill-defined parameters were the mean particle size and the feature that the gas was pressurised. The opponent maintained that "pressurised" had to be understood as the wide range of pressure values which begin (infinitesimally) beyond the atmospheric pressure.
- 3.7.2 In this context, the opponent discussed in some detail T 593/09, T 923/13 and T 626/14.
- 3.7.3 These decisions may be summarised as follows.
  - T 593/09 relates to a polyethylene terephthalate resin covering a metal sheet. The polyethylene terephthalate resin (i.e. film) is characterised by

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a low temperature crystallisation (LTC) temperature ranging from 130 to 165°C. There is evidence showing that depending on the heating rate applied during the measurement, the LTC temperature varies by more than 21°C for one and the same polyethylene terephthalate. Such a variation represents more than 60% of the LTC temperature range of the claim (130 to 165°C).

- T 923/13 relates to a packaging material comprising several constitution layers, i.e. a laminate. The thermoplastic material's innermost layer may involve polymer blends and is characterised by a melt flow index of 5 to 20. There is no common general knowledge method for measuring the melt flow index applicable to a blend of polymers.
- T 626/14 relates to an absorbent body characterised by a thickness of 1.0 to 2.0 mm, among other things. However, the absorbent body is fluffy and easily compressible. A requirement for a repeatable measurement of the thickness is that a predefined pressure is applied to the specimen. This information is missing.
- 3.7.4 The claims in the cases underlying these decisions refer to a parameter (i) defining a narrow value range and (ii) lacking information on how it is measured. No such narrow value range is called for in claims 1 and 3. The mean particle size spans over three orders of magnitude, from 0.1 to 100 micrometres. Whether the soluble coffee particle comprises pressurised gas requires a simple, binary answer: either gas under pressure is included in the soluble coffee particle (and can be released from it) or not.

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- 3.7.5 As to the mean particle size, methods for establishing this value would be known to the skilled person. The patent itself discloses in this context laser diffraction (paragraph [0027]). This measurement may be carried out on the finely-ground insoluble coffee material before adding it to the soluble coffee particle. Furthermore, the board has no evidence that such a method cannot be carried out on the finely-ground insoluble coffee material, e.g. collected after reconstitution of the coffee beverage.
- 3.7.6 The board is also convinced that the skilled person would know how to assess whether a soluble coffee particle includes a pressurised gas.
- 3.7.7 To begin with, the skilled person manufacturing the particles would know whether their process would have introduced trapped gas. As discussed above in point 3.5, the patent and D6 teach how this can be done. Furthermore, the skilled person could determine whether an unknown sample contains trapped gas simply by observing whether gas is released upon reconstitution and foam is generated. This may even be done in a controlled environment at atmospheric pressure, e.g. within a bell jar, as the patent proprietor explained.
- 3.7.8 While the skilled person may encounter some difficulty in setting up such a system, the board has no (experimental) evidence that such a method cannot be carried out.
- 3.7.9 In sum, the board cannot identify any ill-defined parameter in claims 1 and 3. The skilled person would know how to establish the mean particle size and whether pressurised gas is included in the particle.

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- 3.8 To conclude, the opposition division correctly acknowledged that the invention set out in method claim 3 was sufficiently disclosed. It explained that "pressurisation and sealing of the pores can be done and that a certain amount of closed pores" are produced.
- 3.8.1 In other words, the opposition division recognised that the patent sets out at least one way of manufacturing an instant coffee composition comprising soluble coffee particles having internal pores in which at least some of the internal pores contain a pressurised gas.
- 3.8.2 Thus, the invention set out in method claim 3 and product claim 1 is sufficiently disclosed.
- 3.9 The ground for opposition under Article 100(b) EPC does not prejudice the maintenance of the patent as granted.
- 4. Ground for opposition under Articles 100(a) and 54 EPC
- 4.1 The opponent argued that the subject-matter of claim 1 lacked novelty over D6, D25a/D25b, D32a/D32b, D37, D39 and D40. Document D34 was mentioned in passing.
- 4.2 Novelty over D6
- 4.2.1 As discussed above, D6 discloses an instant coffee composition comprising soluble coffee particles having internal pores. At least some of the internal pores contain a pressurised gas. What is in dispute is whether D6 also discloses added finely-ground insoluble coffee material on an outer surface of the particles and the mean particle size.

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- 4.2.2 The opponent referred to paragraph [0035] of D6 which discloses that "the pressurized coffee product can be combined with or substituted for untreated coffee product to beneficially increase beverage froth volume".
- 4.2.3 However, there is no disclosure that "untreated coffee product" is finely-ground insoluble coffee material.

  Instead, this expression refers to soluble coffee particles that have not undergone the treatment of D6 which involves pressure and heat for sealing the open pores.
- 4.2.4 Therefore, the untreated coffee product mentioned in paragraph [0035] of D6:
  - is not added finely-ground insoluble coffee material
  - has no specified particle size
  - is not specifically combined with the soluble coffee particles, namely on its surface
- 4.2.5 To conclude, D6 does not anticipate the subject-matter of claim 1.
- 4.3 Novelty over D25a/D25b
- 4.3.1 D25a discloses a process for preparing an instant coffee composition (claim 8). First, roasted fine ground coffee is added to a concentrated liquid coffee extract at reduced temperatures. Then, the cooled composition is foamed and freeze-dried. Thus, a spraydried instant coffee is produced.

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- 4.3.2 The opponent's allegation that the process in D25a/D25b necessarily and implicitly provides internal, closed pores with pressurised gas is unsupported.
  - First, there is no (experimental) evidence confirming this.
  - Second, the product of claim 1 is generally produced by a different process. Although spraydried coffee (i.e. the product of D25a/D25b) may be used as a starting product in the patent in suit, the patent's manufacturing process requires pressure and heat for sealing the open pores. It is not convincing that the product of D25a/D25b implicitly discloses all features of claim 1.
  - Third, even D25a and D25b themselves provide no support for the allegation that their compositions include pressurised gas. There is no disclosure that when the spray-dried instant coffee is reconstituted with hot water, foam is generated or observed.
- 4.3.3 Therefore, D25a/D25b do not anticipate the subjectmatter of claim 1.
- 4.4 Novelty over D32a/D32b, D34, D37, D39 and D40
- 4.4.1 Like D25a/D25b, these documents relate to soluble coffee products. None of these unambiguously discloses internal pores which contain a pressurised gas. For instance, D37 and D39 mention spray-drying. But the opponent did not convincingly demonstrate that the process conditions in these documents are comparable to those of the patent and D6 or to other conditions inevitably leading to internal pores containing pressurised gas.

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- 4.4.2 Therefore, D32a/D32b, D34, D37, D39 and D40 do not disclose the subject-matter of claim 1.
- To conclude, the subject-matter of claim 1 is novel. The same applies to the remaining claims of the patent as granted, in particular claim 3. The ground for opposition under Article 100(a) EPC in conjunction with Article 54 EPC does not prejudice the maintenance of the patent as granted.
- 5. Ground for opposition under Articles 100(a) and 56 EPC
- 5.1 The opponent argued that the subject-matter of claims 1 and 3 lacked inventive step.
- 5.2 The closest prior art D6
- 5.2.1 The opposition division decided that D6 was the closest prior art, not D25a/D25b. This was also the patent proprietor's view. At the oral proceedings, the opponent used only D6 as the closest prior art.
- 5.2.2 The board agrees that D6 is the closest prior art.
- 5.3 Documents that are not the closest prior art
- 5.3.1 In the written appeal proceedings, the opponent used a wide range of documents to formulate objections of lack of inventive step.
- 5.3.2 As explained in the board's communication under Article 15(1) RPBA 2020, none of these attacks are convincing. The following observations are made for completeness.

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# 5.3.3 D1 and D3

These documents relate to coffee particles provided with closed pores filled with pressurised gas. The disclosure of these documents is similar to D6. The opponent did not show that starting from D1 or D3 would lead to a different assessment of inventive step.

# 5.3.4 D25a/D25b

As discussed above in the context of novelty, D25a/D25b relate to a freeze-dried coffee powder. They address the problem of providing an improved taste and mention neither foamed coffee beverages nor soluble coffee particles having internal pores containing a pressurised gas. D25a/D25b are not a promising springboard for assessing inventive step.

# 5.3.5 D5, D7, D33 to D36 and D38

These documents relate to (spray-dried) soluble coffee which includes other coffee material. Similar considerations as for D25a/D25b apply. The opponent has not contested this.

#### 5.3.6 D31

D31 is an office action by an examiner of the USPTO dating from 2015. This is some four years after the date of filing of the application on which the patent in suit is based. D31 is not prior art.

#### 5.3.7 D2 and D26 to D29

The opponent first used D2 and D26 to D29 as secondary documents in inventive-step attacks. It then argued

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that the documents may be used "vice versa". The board understands this to mean that the opponent regards D2 and D26 to D29 as closest prior art.

However, in view of the schematic reasoning provided, it is not possible to conclude that these documents are relevant (i) as closest prior art and (ii) within the context of the problem-solution approach.

# 5.3.8 D8 to D24

The opponent referred to all documents from D8 to D24 as relevant documents. However, it is not possible to conclude that these documents are relevant (i) as closest prior art and (ii) within the context of the problem-solution approach. The reason is that the opponent failed to develop such an approach for these documents.

- 5.3.9 To conclude, only D6 qualifies as the closest prior art.
- 5.4 Distinguishing feature

D6 does not disclose added finely-ground insoluble coffee material on an outer surface and the mean particle size, as set out in point 4.2 above.

- 5.5 The technical problem
- 5.5.1 In the patent, the problem to be solved is to provide an instant coffee beverage with an improved foam, in particular with a more stable foam (paragraphs [0034] and [0036]).

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- 5.5.2 In the patent's examples, two instant coffee compositions are compared. Both compositions comprise soluble coffee particles having internal pores containing a pressurised gas. The compositions are reconstituted to a coffee beverage by adding hot water.
  - Example 1 (A) relates to an instant coffee beverage reconstituted from soluble coffee particles without added finely-ground insoluble coffee material. This is a composition according to D6.
  - Example 2 (B) relates to an instant coffee beverage reconstituted from soluble coffee particles with added finely-ground insoluble coffee material. This is a composition according to claim 1.

Figure 2 shows that composition B has a longer-lasting foam. Moreover:

"the foam generated by the product of Example 1 (A) was considerably less stable than the foam generated by the product of Example 2 (B). The foam generated by the product of Example 1 (A) had substantially disappeared from the surface after 30 minutes. By contrast, the foam of the product of Example 2 (B) took 60 minutes to substantially disappear. At each time interval, the foam height of the product of Example 2 (B) was the same or higher than the foam height of the product of Example 1 (A)" (patent, paragraph [0084]).

- 5.5.3 Therefore, the patent shows that the problem of providing an instant coffee beverage with more stable foam is solved.
- 5.5.4 There is no reason to reformulate the technical problem.

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5.5.5 In view of this, the opponent's allegation that the technical problem is to provide an alternative composition is without merit.

# 5.6 Obviousness

- 5.6.1 The opponent referred to several documents (D25a/D25b to D29) allegedly providing the solution. However, none of these documents suggests adding finely-ground insoluble coffee material to stabilise the foam of an instant coffee beverage. What is more, the opponent has not even shown that these documents disclose a foamed coffee beverage.
- 5.6.2 Therefore, the skilled person would have no pointer from the prior art that adding finely-ground insoluble coffee material would stabilise the foam of an instant coffee beverage.
- 5.7 To conclude, the subject-matter of claims 1 and 3 involves an inventive step. The ground for opposition under Article 100(a) EPC in conjunction with Article 56 EPC does not prejudice the maintenance of the patent 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:



A. Nielsen-Hannerup

A. Haderlein

Decision electronically authenticated