

**Internal distribution code:**

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

**Datasheet for the decision  
of 1 April 2022**

**Case Number:** T 1664/19 - 3.2.01

**Application Number:** 12730817.9

**Publication Number:** 2713778

**IPC:** A24B3/14, A24C5/18, A24F47/00,  
A24D3/06, A24B15/12, A24B15/16,  
A24B15/30, A24D1/00

**Language of the proceedings:** EN

**Title of invention:**  
RODS FOR USE IN SMOKING ARTICLES

**Patent Proprietor:**  
Philip Morris Products S.A.

**Opponent:**  
Albright IP Limited

**Headword:**

**Relevant legal provisions:**  
EPC Art. 108, 84, 123(2), 100(b), 83, 54, 56, 14(4)  
EPC R. 99(2)  
RPBA 2020 Art. 13(2)  
RPBA Art. 12(2)

**Keyword:**

Admissibility of appeal - appeal sufficiently substantiated  
(yes)

Novelty - main and first request (no) - auxiliary request 2  
(yes)

Claims - clarity - auxiliary request 2 (yes)

Amendments - auxiliary request 2 - allowable (yes)

Sufficiency of disclosure - (yes)

Inventive step - auxiliary request 2 (yes)

Amendment after summons - taken into account (no)

Statement of grounds of appeal - party's complete case

**Decisions cited:**

G 0003/14

**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 1664/19 - 3.2.01

**D E C I S I O N**  
**of Technical Board of Appeal 3.2.01**  
**of 1 April 2022**

**Appellant 1:** Philip Morris Products S.A.  
(Patent Proprietor) Quai Jeanrenaud 3  
2000 Neuchâtel (CH)

**Representative:** Morf, Jan Stefan  
Abitz & Partner  
Patentanwälte mbB  
Postfach 86 01 09  
81628 München (DE)

**Appellant 2:** Albright IP Limited  
(Opponent) County House  
Bayshill Road  
Cheltenham  
Gloucestershire GL50 1BA (GB)

**Representative:** Edson, Russell Gregory  
Withers & Rogers LLP  
2 London Bridge  
London SE1 9RA (GB)

**Decision under appeal:** **Interlocutory decision of the Opposition  
Division of the European Patent Office posted on  
20 March 2019 concerning maintenance of the  
European Patent No. 2713778 in amended form.**

**Composition of the Board:**

**Chairman** G. Pricolo  
**Members:** S. Mangin  
A. Jimenez

## **Summary of Facts and Submissions**

- I. The appeals were filed by the appellant 1 (proprietor) and the appellant 2 (opponent) against the interlocutory decision of the opposition division finding that, on the basis of the auxiliary request 1, the patent in suit (hereinafter "the patent") met the requirements of the EPC.
- II. The opposition division held that:
- (a) for the main request
    - the requirements of Articles 83 (in conjunction with Article 100(b)), 84 and 123(2) EPC were fulfilled, and
    - the subject-matter of claim 1 was not novel over D3 (US 5,819,751) and K2 (GB 1 509 018).
  - (b) for auxiliary request 1
    - the requirements of Articles 83 (in conjunction with Article 100(b)), 84 and 123(2) EPC were fulfilled,
    - the subject-matter of claim 1 was novel over D3 and involved an inventive step starting from D3, and starting from K2, K3 (US 4291711) or D4 (WO 2010/113702), which were considered more remote,
    - and the subject-matter of claim 9 was novel over K2 and involved an inventive step starting from K2 and starting from D3.
- III. Oral proceedings were held before the Board on 1 April 2022 per videoconference.
- IV. **The appellant 1 (patent proprietor)** requested that the decision under appeal be set aside and that the patent be maintained according to the main request, filed during the opposition proceedings on 25 July 2017 or in

the alternative on the basis of the 1st to the 46th auxiliary requests submitted with the reply to the statement of grounds of appeal, wherein the 2nd auxiliary request corresponds to the version found allowable by the opposition division.

**The appellant 2 (opponent)** requested that the decision under appeal be set aside and that the patent be revoked.

- V. Independent claims 1 and 9 of the **main request** with the feature numbering of the opposition division (see annex to the appealed decision) reads as follows:

Claim 1:

**[A]** A heated smoking article  
**[B]** comprising an aerosol-generating substrate,  
**[C]** wherein the aerosol-generating substrate comprises a rod (22)  
**[D]** comprising a gathered sheet of homogenised tobacco material (8)  
**[D1]** circumscribed by a wrapper (12)  
**[E]** and the sheet of homogenised tobacco material is crimped.

Claim 9:

**[F]** Use of a heated smoking article according to any one of claims 1 to 7 for use  
**[G]** in an electrically heated aerosol-generating system.

- VI. Independent claim 1 of the **first auxiliary request** corresponds to claim 1 of the main request. Independent claim 9 has been deleted.

VII. Independent claim 1 of the **second auxiliary request** (corresponding to auxiliary request 1 maintained by the opposition division) corresponds to claim 1 of the main request with the addition of the feature: **[E1]** *"and wherein the sheet of homogenised tobacco material is formed by a casting process"*.

Independent claim 9 of the **second auxiliary request** with the feature numbering of the opposition division (see annex to the appealed decision) reads as follows:  
**[F]** Use of a heated smoking article  
**[F1]** comprising an aerosol-generating substrate,  
**[F2]** wherein the aerosol-generating substrate comprises a rod (22)  
**[F3]** comprising a gathered sheet of homogenised tobacco material (8)  
**[F4]** circumscribed by a wrapper (12)  
**[F5]** and the sheet of homogenised tobacco material is crimped  
**[G]** in an electrically heated aerosol-generating system.

VIII. In the present decision, reference is made to the following additional documents:  
K1: US 2008/0092912 A1  
K4: Legislation on Smoking & Health,  
<https://www.industrydocumentslibrary.ucsf.edu/tobacco/docs/yxdh0192>, BATCo Limited, 1987, published 26 January 2005.  
K6: JP2010-178730 A  
K6a: English translation of K6  
D6: US 5 348 027 A  
D7: EP 2 062 484 A1  
D8: US 5 016 656 A  
D11: EP2 412 255 A1  
D12: US 5 988 176 A

D14: J. Appl. Toxicol. 23, 329-339 Part 1, (2003)

D15: J. Appl. Toxicol. 23, 329-339 Part 2, (2003)

## **Reasons for the Decision**

1. Admissibility of the appeal of appellant 1 (patent proprietor)

The appeal of appellant 1 is admissible in view of Article 108 EPC and Rule 99(2) EPC.

Appellant 2 (opponent) contested the admissibility of the appeal of appellant 1 (patent proprietor) in his reply to the statement of grounds of appeal (reference is made to the first paragraph under II.1, bridging page 1 and 2). During oral proceedings in appeal, appellant 2 relied upon his written submissions without adding further comment. Appellant 1 did not provide any further comment during the oral proceedings.

In its communication pursuant Article 15(1) RPBA 2020, the Board was of the preliminary opinion that the appeal of appellant 1 was admissible. In the absence of any further submissions, the Board sees no reason to change its opinion, which is confirmed.

Appellant 2 contests the admissibility of the appeal of appellant 1. In their view the Board cannot review the decision as the appellant 1 (proprietor) does not explain why they believe the decision is wrong - they simply "cut and paste" their previous arguments.

As mentioned by appellant 1 under point 3 in its letter of 15 February 2021, the statement of grounds of appeal refers to the appealed decision and the Board is in

position to understand why the decision is alleged to be incorrect and on what facts appellant 1 bases its arguments. The statement of grounds of appeal of appellant 1 is not a simple "copy paste" of the objections raised in opposition proceedings.

2. Main request and first auxiliary request 1

2.1 Novelty of claim 1 over D3 and K2

The Board confirms the decision of the opposition division which held that the subject-matter of claim 1 of the main request was not novel over D3 and K2. This conclusion also applies to claim 1 of the first auxiliary request which is identical to claim 1 of the main request.

Appellant 1 argued in their statement of grounds of appeal that the subject-matter of claim 1 was novel over D3 and K2 (reference is made to point II on page 2 of the statement of grounds of appellant 1). During oral proceedings in appeal, appellant 1 relied on their written submissions. Appellant 2 did not provide further argument during the oral proceedings.

In its communication pursuant Article 15(1) RPBA 2020, the Board was of the preliminary opinion that the subject-matter of claim 1 lacked novelty in view of D3 and K2. As no further submissions were made by the parties, the Board sees no reason to depart from its preliminary opinion, which is confirmed.

Reference is made to point 12 on pages 8-10 of the appealed decision. In particular, the Board agrees with the Opposition Division that D3 discloses a gathered sheet of homogenised tobacco material and that K2



discloses a heated smoking article comprising an aerosol-generating substrate.

3. Second auxiliary request

3.1 Sufficiency of disclosure of the invention according to claim 9

The Board confirms the decision of the opposition decision holding that the invention according to the subject-matter of claim 9 is disclosed in a manner sufficiently clear and complete for it to be carried out by a person skilled on the art.

3.1.1 Appellant 2 is of the opinion that a skilled person cannot build and/or use the smoking article according to claim 9 without the use of inventive skill. Appellant 2 submits that without specifying the features of the heated smoking article and the electronically heated aerosol generating system which permit use of the smoking article in the electronically heated aerosol generating system, the skilled person would be unable to perform the invention over the whole area claimed without undue burden and without needing inventive skills.

For example, how is the heated smoking article configured to function within an electronically heated aerosol generating system when a standard 'combustible' smoking article would allegedly not function in an electronically heated aerosol generating system? Secondly, how does the electronically heated aerosol generating system provide the correct amount of heat energy to the heated smoking article, in the correct location, in a way that other methods of heating would not? These questions are not resolved across the full breadth of the claim by the disclosure of the patent.

3.1.2 The Board does not agree. Paragraphs [0040]-[0050] and examples 1 and 2 of the patent provide typical dimensions of the rod of gathered crimped sheet of homogenised tobacco material circumscribed by a paper wrapper to be used for an aerosol-generating substrate in electrical heated smoking article. At the time of filing of the application, the skilled person is well aware of electrically heated aerosol generating systems and knows how to use the heated smoking article described in the patent in an electrically heated aerosol-generating system. An example of such a heated smoking article is disclosed in paragraph [0006] of the patent. The skilled person using the information in the patent and his common general knowledge is able to carry out the invention without inventive skills and undue burden.

3.2 Claim 9 - Inventive step

K2 in combination with common general knowledge, D11 or D12 and K1 in combination with D3 or D6 do not render the subject-matter of claim 9 obvious.

3.2.1 Starting from K2 in combination with common general knowledge, D11 or D12

K2 is directed to a classic cigarette which is burnt. The subject-matter of claim 9 differs from the smoking article of K2 in that it is directed to a use in an electrically heated aerosol-generating system (features [F] and [G]).

The use of a heated smoking article provides a milder smoking experience compared to burned smoking articles. The problem to be solved may be considered as the

provision of a milder smoking experience, as submitted by appellant 2.

- 3.2.2 Appellant 2 is of the opinion that if the invention according to claim 9 is sufficiently disclosed bearing in mind the skilled person's common general knowledge, then claim 9 should be considered obvious starting from K2 in combination with common general knowledge, D11 or D12. In other words, it is obvious for the skilled person to use the cigarette disclosed in K2 with an electrically heated aerosol generating system as disclosed in D11 or D12.

Any modifications required to the cigarette of K2 to use it in one of these electronically heated aerosol generating systems would be trivial and within the knowledge of the skilled person. It would be a simple matter, for example, to ensure that the rod of the aerosol-generating substrate of K2 were in an appropriate location to be heated by the electric heating arrangement of the electronically heated aerosol generating system, e.g., as described in D12.

Appellant 2 argues that the skilled person starting from K2 and trying to solve the technical problem would look to document D11. Document D11 discloses an electronically heated aerosol generating system and states that "non-combustion type flavour suction articles ... will not generate smoke or undesirable combustion products" (see paragraph 2). Therefore, the skilled person would be motivated to use the cigarette of K2 in the arrangement of D11.

Alternatively, the skilled person starting from K2, trying to solve the technical problem of "providing a milder smoking experience", would look to document D12.

Document D12 discloses an electronically heated aerosol generating system and states that this is an improvement as using combustible cigarettes in the traditional way "produces side stream smoke" and "once lit, they must be fully consumed or discarded" (column 1, lines 55 to 57). The skilled person is also taught that traditional cigarettes "operate adequately in an electrical lighter" (see column 2, lines 40 to 42). Therefore, the skilled person would be motivated to use the cigarette of K2 in the arrangement of D12.

- 3.2.3 The Board disagrees with appellant 2 and sees no contradiction between the sufficiency of disclosure of the invention according to claim 9 and the inventive step of claim 9 starting from K2. Indeed the skilled person can carry out the invention with the information provided in the patent taking into account common general knowledge. However, starting from the conventional cigarette disclosed in K2, the skilled person would not use it in an electrically heated aerosol generating system. It is indeed known that using a heated smoking article provides a milder smoking experience compared to burned smoking articles. But starting from a conventional cigarette, which is supposed to be burned, the skilled person has no incentive to insert it in an electrically heated aerosol generating system. Indeed these systems require adapted smoking articles as can be seen in D11 and D12. The starting point, here the conventional burnt cigarette of K2, is not an appropriate starting point as it actually leads the skilled person away from the invention as such conventional cigarettes are in principle not to be used with electrically heated aerosol generating systems.

Even if the skilled person would start from K2, there is no incentive to insert the conventional cigarette into electrically heated smoking articles such as those mentioned in D11 or D12.

D11 (paragraphs [0017], [0019], [0022]) discloses a non-combustion type tobacco sheet produced differently from conventional methods for producing a tobacco sheet by having additional steps of selectively reducing anions contained in the aqueous extract, and adding an acid to the low-anion liquid to provide a neutralized liquid. The tobacco sheet is formed into a cylinder, brought with a cylindrical mouthpiece and wrapped by a heat-conducting wrapping material (typically made of aluminum) to form a roll. The roll is then inserted into a heater having a hollow cylindrical structure made of aluminum and covered by an electric resistor. The heater is heated at a temperature of 80 to 140 °C. Starting from the conventional cigarette of K2, the skilled person cannot simply insert the conventional cigarette into the heater of D11. The cigarette must be designed differently to be used with the electric heater of D11. In particular:

- The electric heater of D11 requires a wrapper made of aluminum to better heat the smoking article.
- The heating temperature is lower in electric heated smoking devices than the combustion temperature in conventional cigarettes. The tobacco sheet will therefore need to be adapted to take into account this difference of temperature.

Document D12 discloses a cigarette which comprises a cut filler tobacco plug operable with consistency when smoked as part of an electrical smoking system. The cigarette 23 to be inserted in the lighter 25 has a construction which is very distinct from conventional

cigarettes as can be seen on figures 4A and 4B. The skilled person would therefore need to modify the conventional cigarette of K2 accordingly to use it with the electric heater of D12. Again such modifications are extensive and not obvious for the skilled person. Appellant 2 refers to column 2, lines 38-46 and submits that D12 discloses that traditional cigarettes "operate adequately in an electrical lighter". But this is not the teaching of this passage. This passage teaches that *"cigarettes when fully filled with cut filler tobacco tended to operate adequately in an electrical lighter for the first several puffs. Thereafter, its delivery would tend to taper off. The same phenomenon would tend to occur when more traditional cigarettes were smoked in an electrical lighter"*. Considering the forementioned passage the skilled person is not prompted to use a "traditional cigarette", but rather taught away.

3.2.4 Starting from K1 in combination with D3 or D6

K1 discloses a cigarette incorporated within an electrically powered aerosol generating device. K1 primarily deals with tobacco cut filler but also discloses to use certain types of reconstituted tobacco sheets that can be formed, rolled or gathered into a desired configuration (paragraph [0056]).

The subject-matter of claim 9 differs from K1 in that the homogenised tobacco material is crimped (feature [E]).

3.2.5 Appellant 2 is of the opinion that the problem to be solved may be regarded as how to make the sheet of homogenised tobacco material easier to gather (paragraph [0031] of the patent).

Appellant 2 is of the opinion that the skilled person starting from K1 and trying to solve the technical problem would consider D3 as it discloses that embossed lines allow a tobacco sheet to gather in a more uniform pattern (see column 6, lines 59 to 61). Accordingly, the skilled person would use the sheet of homogenised tobacco material from D3 in the arrangement of K1, thereby arriving at the invention of claim 9.

A skilled person starting from K1 and trying to solve the technical problem of "how to make the sheet of homogenised tobacco material easier to gather" would also look to D6, as D6 discloses the advantages of embossing/crimping (see column 10, lines 28 to 41). Accordingly, the skilled person would use the sheet of homogenised tobacco material from D6 in the arrangement of K1, arriving at the invention of claim 9.

- 3.2.6 The Board is not convinced by appellant 2's above objection. Starting from the electrically heated cigarette of K1, the skilled person has no incentive to combine K1 with D3 or D6.

K1 primarily discloses electrically heated tobacco cut filler in contact with the aerosol forming material while D3 and D6 discloses fuel heated tobacco material. The differences in the way the smoking articles are heated (the use of an electrical resistance heating element 70 and 72 in K1 and the use of a fuel element 10 in D3 and D6) conditions the construction of the smoking element. Therefore, the skilled person would not combine the teaching of K1 with either D3 or D6.

But even if the skilled person would combine the teaching of K1 with D3 or D6: as argued by appellant 1

the embossing referred to in D3 (see column 6, lines 59 to 61) and D6 (see column 10, lines 28 to 41) has an impact on the size and the density of the gathered paper, which in turn has an influence on the capillary effect and the pressure drop. This requires the skilled person to adapt the smoking device to compensate for the crimping, which results in an undue burden for the skilled person.

### 3.3 Admissibility of K6/K6a - Article 12(4) RPBA 2007

The Board does not admit K6 (Japanese patent) and K6A (English translation of K6) in the proceedings and the inventive step objections based on K6/K6A.

Together with its statement of grounds of appeal submitted before 1 January 2020 appellant 2 submitted documents K6 and K6a. The question whether new submissions should be admitted must be decided on the basis of Article 12(4) RPBA 2007, which gives the Board discretion not to admit, on appeal, documents that could have been presented in the opposition proceedings (Article 25(2) RPBA 2020).

#### 3.3.1 Appellant 2 submits that documents K6 and K6a are filed with the grounds of appeal as a response to the unexpected conflicting decision of the opposition division between the sufficiency of disclosure of the invention defined by claim 9 and the acknowledgement of an inventive step starting from K2 in combination with D11, D12, D14 and D15. K6 is according to appellant 2 highly relevant and its filing is an appropriate and immediate reaction to the decision of the opposition division.



3.3.2 The Board notes that claim 9 of auxiliary request 2 corresponds to claim 9 of the main request filed with the reply to the notice of opposition on 25 July 2017 about a year and a half before oral proceedings in opposition.

As a reaction to the main request filed by the proprietor during opposition and in particular to the change of claim 9 to a use claim, the opponent (appellant 2) submitted on 26 September 2017 two documents D14 and D15 and argued that *"claim 9 lacks an inventive step over any of the above documents, or document combination, when incorporating the teaching of D14 or D15"*.

The opponent then made further submissions and filed further documents with their letter of 22 November 2018 and requested the introduction of the third party observations and documents K1-K5 into the opposition proceedings with letter of 18 January 2019.

During oral proceedings in opposition, the opponent submitted new inventive step objections (see annex to the appeal decision).

Therefore, appellant 2 had various opportunities up to the day of the oral proceedings in opposition proceedings for filing K6 and K6a and formulating an inventive step objection based on these documents.

Furthermore appellant 2 cannot be surprised by the decision of the opposition division. The proprietor had argued during opposition proceedings that claim 9 was sufficiency disclosed (see point 3.2 on page 8 of the reply of the proprietor on 25 July 2017) and that claim 9 involved an inventive step (see third paragraph of page 22 of the reply of the proprietor on 25 July 2017) and, as already explained under point 3.2.3 above there is no contradiction between the finding of the opposition division on sufficiency of disclosure of the

invention according to claim 9 and on inventive step of claim 9 starting from K2.

For these reasons, documents K6 and K6a are not admitted into the appeal proceedings.

3.4 Admissibility of further attacks raised by appellant 2 during oral proceedings in appeal

The Board does not take into account the following attacks raised for the first time in oral proceedings before the Board.

- (a) starting from K2 in combination with D14,
- (b) starting from D12 in combination with K2,
- (c) various other combinations of documents D3, D14, D15, K2 and the common general knowledge of the skilled person.

(a) Appellant 2 argues that D14 and D12 are similar and that the lack of inventive step objection combining K2 and D12, already discussed above, is analogous. Therefore the objection of inventive step starting from K2 in combination with D14 is not a change of case and should be admitted in the appeal proceedings.

According to Article 13(2) RPBA 2020, any amendment to a party's appeal case made after notification of a summons to oral proceedings shall in principle, not be taken into account unless there are exceptional circumstances, which have been justified by cogent reasons.

While D14 and D12 appear to be similar, no specific lack of inventive step objection has been raised by appellant 2 in view of K2 in combination with D14 in the written submissions in appeal. The Board is of the

opinion that either D14 and D12 have a similar content such that the lack of inventive step starting from K2 in combination with D12 or D14 leads to the same conclusion (in the present case claim 1 is not rendered obvious as mentioned above) or D12 and D14 have different teachings and the objection of lack of inventive step starting from K2 in combination with D14, constitutes a change of case but no exceptional circumstances are present.

(b) Appellant 2 is of the opinion that the objection of lack of an inventive step starting from D12 in combination with K2 is similar to the inventive step objection starting from K2 in combination with D12 submitted in the grounds of appeal and therefore does not constitute an amendment to their appeal case. Appellant 2 adds that the sentences under point 5.2.7 on page 13 of the grounds of appeal reading *"Therefore, the skilled person would be motivated to use the cigarette of K2 in the arrangement of D12 to try and solve the technical problem"* should be read as an objection of inventive step starting from K2 in combination with D12 but also starting from D12 in combination with K2.

The Board does not agree. The change of starting point implies different distinguishing features over the subject-matter of claim 9 and requires therefore a reformulation of the technical problem and different incentives to solve the newly defined problem. The change of starting point constitutes therefore a change of case. Furthermore point 5.2.7 titled *"Lack of inventive step starting from document K2 in combination with D12"* clearly states that the objections of lack of inventive step is based on K2 as starting point and not on D12. This objection constitutes therefore an

amendment to appellant 2's appeal case that shall not be taken into account in the absence of exceptional circumstances.

(c) Appellant 2 argues that the passage under point 5.2.10 of the statement of grounds of appeal reproduced below is a specific reference to attacks developed in their letter of 22 November 2018 and should be taken into account.

*"The Opponent also maintains their arguments of the submission of 22 November 2018 and the Oral Proceedings that claim 9 of Auxiliary Request 1 lacks an inventive step over various other combinations of documents D3, D14, D15, K2 and the common general knowledge of the skilled person".*

The Board does not agree. The general reference to the appellant 2's submissions in the preceding opposition proceedings amounts to no more than a mere assertion that the contested decision is incorrect, without stating the legal or factual reasons why that decision should be set aside.

Consequently, appellant 2 has left it entirely to the Board and the appellant 1 to conjecture in what respect appellant 2 might consider the decision under appeal regarding inventive step over various combinations of documents D3, D14, D15, K2 and the common general knowledge of the skilled person to be defective.

Therefore, the Board considers that the above inventive step objections submitted with the statement of grounds of appeal do not meet the requirements of Article 12(2) RPBA 2007 (which applies here), according to which the statement of grounds of appeal shall set out clearly and concisely the reasons why it is requested that the decision under appeal be reversed, amended or upheld, and should specify expressly all the facts, arguments

and evidence relied on. These inventive step objections are not taken into consideration in accordance with Article 12(4) RPBA 2007, last sentence.

3.5 Claim 9 - Added subject-matter - Article 123(2) EPC

As held by the Opposition Division, the subject-matter of claim 9 does not extend beyond the content of the application as originally filed.

3.5.1 Claim 9 has been changed from a product claim to a use claim. Basis for the amendment can be found in:

- original claim 24

reading: *"A heated smoking article according to any one of claims 19-22 for use in an electrically heated aerosol-generating system")* and

- page 5, line 36 - page 6, line 2 of the application as originally filed,

reading: *"In another embodiment, rods according to the invention may be used as aerosol-generating substrates in heated smoking articles for use in electrically heated aerosol-generating systems in which the aerosol-generating substrate of the heated smoking article is heated by an electrical heat source".*

3.5.2 Under point 3.1 dealing with Article 123(2) EPC on page 5 of the grounds of appeal, appellant 2 states that the subject matter defined by claim 9 of auxiliary Request 2 is broader than claim 9 of the patent-as-granted as the 'use' is not clearly defined and could be any physical activity with a heated smoking article in an electrically heated aerosol-generating system as opposed to the original claim 9 directed to a physical entity which is narrower as the wording makes it clearer what would constitute a 'use'.

Furthermore appellant 2 is of the opinion that the omission of the "electrical heat source" in claim 9 contravenes the provisions of Article 123(2) EPC.

- 3.5.3 The Board notes that the first objection is an objection under Article 123(3) EPC rather than Article 123(2) EPC, and that the change of category of claim 9 from a product claim to a use claim limits the scope of protection. Claim 9 of auxiliary request 2 covers the use of the heated smoking article for use in an electrically heated aerosol generating system and no longer protects the heated smoking article as such.

Moreover, "an electrically heated aerosol-generating system" implies that there is an "electrical heat source" heating the heated smoking article. The lack of an explicit presence of an electrical heat source in claim 9 does not lead to an unallowable intermediate generalisation.

- 3.6 Claim 9 - clarity - Article 84 EPC

The expression "use of" at the beginning of claim 9 changes the product claim into a use claim. While the scope of protection is changed, this amendment does not introduce non-compliance with Article 84 EPC.

- 3.6.1 Appellant 2 is of the opinion that claim 9 is not clear because a skilled person would not understand how a heated smoking article must be used in an electrically heated aerosol-generating system in order to infringe this claim.

Claim 9 also lacks clarity because the claim lacks the essential features of the invention of the aerosol generating substrate and electrical heat source. Without these essential features, it would be unclear

to the skilled person what would or would not constitute infringement of this claim. Furthermore, without providing an electrical heat source and heating the aerosol generating substrate, it would not be possible to carry out the invention. As these essential features are not included in claim 9, the claim contravenes Article 84 EPC.

- 3.6.2 According to G3/14, the claims of the patent may be examined for compliance with the requirements of Article 84 EPC only when, and then only to the extent that the amendment introduces non-compliance with Article 84 EPC.

The alleged clarity issues raised by appellant 2 were already present in claim 9 as granted as the use indication was already contained in granted claim 9.

- How the heated smoking article was to be used in an electrically heated aerosol-generating system was not defined in granted claim 9.

- The aerosol generating substrate and the electrical heat source were not present in granted claim 9.

Therefore the amendments made to claim 9 did not introduce non-compliance with Article 84 EPC.

- 3.7 Claim 1 - clarity - Article 84 EPC

The Board confirms the decision of the opposition division holding claim 1 clear.

- 3.7.1 According to appellant 2, the limitation of the sheet of homogenised tobacco material being "formed by a casting process" is unclear. Without specifying further features of the casting process which differentiate the claimed process from those which do not work (such as

those described in document K4), claim 1 of auxiliary request 1 lacks clarity under Article 84 EPC.

The feature of "form[ing] the sheet of homogenised tobacco with a casting process" must itself include all features which are necessary to obtain the desired effect or, differently expressed, which are necessary to solve the technical problem with which the application is concerned. This is not the case - document K4, for example, makes it clear that some casting processes would not obtain the desired effect (the casting sheet would be too brittle to be gathered and crimped). Therefore, claim 1 of auxiliary request 1 lacks essential features and so lacks clarity, contrary to Article 84 EPC.

Furthermore the skilled person cannot identify in the end product, whether the sheet of homogenised tobacco material was formed by a casting process. Page 14 of K4 and in particular the table on page 14 does not enable the skilled person to differentiate sheets of homogenised tobacco material formed by a casting process from sheets of homogenised tobacco material formed by other process in particular the papermaking process.

- 3.7.2 The Board does not agree. The casting process is a well known process for making sheets of homogenised tobacco material, as can be seen from page 14 of document K4 dated 1987 and paragraph [0064] of the patent. The technical effect of using a casting process has not been introduced into claim 1, such that whether the technical effect is achieved or not is not relevant for the clarity of claim 1. But in any event, it is within the customary practice of the skilled person to produce



casting sheets that are more or less brittle depending on the intended use.

Furthermore, contrary to the appellant 2's allegations, the process feature "formed by a casting process" can be identified in the end product. The table on page 14 of K4 shows different properties for the different process used (weight, pressure drop, tar content, type of solvent or adhesive). Additionally, the appearance, the density and the tensile strength are other parameters that can be investigated to identify the process used to produce the tobacco sheet.

Appellant 2 has pointed out that in the table of page 14, the skilled person would not be able to distinguish the two slurry processes, corresponding to a casting process, with the 2-step paper making process as in particular the values of the weight and the pressure drop of the sheet made by a paper making process lies between the values of the two slurry processes. But as pointed out by appellant 1, the paper making process is very distinct from the casting process. The paper making process uses tobacco fibres while the casting process uses small tobacco particulate, which will result in sheets having different mechanical properties. In particular the tensile strength of the sheet made by a papermaking process will be much higher than the properties of the sheet made by casting even if some cellulose fibres are added as disclosed in paragraph [0066] of the patent.

### 3.8 Claim 1 - Added subject-matter - Article 123(2) EPC

As held by the Opposition Division, the subject-matter of claim 1 does not extend beyond the content of the application as originally filed.

- 3.8.1 Appellant 2 is of the opinion that introducing in claim 1 *"the sheet of homogenised tobacco material [being] formed by a casting process"* without specifying further features of the casting process results in an unallowable intermediate generalisation, contrary to Article 123(2) EPC.

The skilled person would only be able to reproduce the invention by following the particular processes described on page 9, lines 28-30 of the application as filed - i.e. using "a slurry comprising particulate tobacco, guar gum, cellulose fibres and glycerine" to enable the gathering and crimping of the sheet of homogenised material formed by a casting process.

- 3.8.2 The Board does not agree. Page 9, lines 23-27 of the application as originally filed discloses:  
*"Sheets of homogenised tobacco material for use in the invention are preferably formed by a casting process of the type generally comprising casting a slurry comprising particulate tobacco and one or more binders onto a conveyor belt or other support surface, drying the cast slurry to form a sheet of homogenised tobacco material and removing the sheet of homogenised tobacco material from the support surface"*.

The above passage discloses a typical casting process known to the skilled person as can be seen from the first column on page 14 of document K4. The introduction of *"the sheet of homogenised tobacco material [being] formed by a casting process"*, without the introduction of any further details of the process does not therefore result in an unallowable intermediate generalisation.

The passage on page 9, lines 28-30 *"for example, in certain embodiments sheets of homogenised tobacco material for use in the invention may be formed from a*

*slurry comprising particulate tobacco, guar gum, cellulose fibres and glycerine by a casting process*" is a specific example that does not need to be introduced into claim 1.

### 3.9 Claim 1 - Novelty over D3

The Board confirms the decision of the opposition division, which held that the subject-matter of claim 1 was novel over D3.

3.9.1 Appellant 2 argues that D3 discloses all the features of claim 1. In particular the passage on column 2, lines 56 to 57, discloses that "preferably the substrate is a cast sheet material" and the previous paragraph on column 2, lines 52 to 55 discloses that "the aerosol forming material is carried in a substrate material, such as ... gathered tobacco paper". The same word 'substrate' is used, and it is clear to the skilled person, reading these two paragraphs together, that the substrate can be both a gathered tobacco paper and a cast sheet material. Paper is a type of sheet material.

3.9.2 The Board judges differently.

The passage of column 2, lines 52-59 of D3 reads:  
*"The aerosol forming material generally is carried in a substrate material, such as a reconstituted tobacco cut filler or by a substrate such as tobacco cut filler, gathered paper, gathered tobacco paper, or the like. Preferably the substrate is a reconstituted tobacco cut filler cast sheet material, which is formed into a continuous rod or substrate tube assembly on a conventional cigarette making machine".*

The above cited passage does not disclose directly and unambiguously a sheet of homogenised tobacco which is both crimped and formed by a casting process. The last sentence of the above passage discloses a tobacco cut filler cast sheet and not a homogenised tobacco paper formed by a casting process.

3.10 Claim 1 - Inventive step starting from D3 or starting from D4/D4a

The subject-matter of claim 1 is not rendered obvious either starting from D3 in combination with K3 or starting from D4/D4a in combination with D3, D6 or K3.

3.10.1 Document D3 in combination with K3

D3 discloses a heated smoking article which either comprises a gathered web of tobacco paper or a reconstituted tobacco cut filler cast sheet.

The subject-matter of claim 1 differs from D3 in that the gathered sheet of homogenised tobacco material is formed by a casting process.

3.10.2 Appellant 2 considers the technical problem associated to the above distinguishing feature as to provide a smoking article which is simpler to manufacture.

While K3 refers to a tobacco smoke filter and not a heated smoking article, these are very close technical areas, with inherently similar technical considerations, such that the skilled person starting from D3 would consult K3.

K3 discloses in column 2, lines 41 to 56 that the filter element comprises a *"reconstituted tobacco*

*member formed from a coherent sheet of reconstituted tobacco which has been uniformly embossed with a series of parallel grooves. The embossed reconstituted tobacco sheet is then formed or compacted together and then bonded together into a self-sustaining dimensionally stable axially elongated body whose longitudinal axis extends parallel to the embossed groove".*

Column 9, lines 6 to 12 of K3 state that the tobacco filters may be "readily and easily manufactured by a continuous automated process in which the reconstituted tobacco member is produced from a continuous web of the coherent reconstituted tobacco sheet".

Therefore, the skilled person starting from document D3, looking to provide a smoking article which is simpler to manufacture would combine it with the teaching of K3.

The benefits mentioned in K3 are entirely independent of the subsequent use of the cast sheet in a tobacco filter or heated smoking article, and so this use is irrelevant for the purposes of assessing inventive step.

- 3.10.3 As argued by appellant 1, the skilled person starting from D3 dealing with rod substrates would not look into the filters disclosed in K3. Depending on whether the skilled person is seeking to manufacture a filter or a tobacco rod, they will look for different properties (weight density, pressure drop...).

Furthermore starting from D3 the skilled person is taught to either use a gathered web of tobacco paper or a reconstituted tobacco cut filler cast sheet material. Starting from D3, the skilled person, looking to simplify the manufacturing process would then use a reconstituted tobacco cut filler cast rather than

consult K3 dealing with filters. The argument of appellant 2 is based on an ex post facto analysis.

- 3.10.4 Document D4/D4a in combination with either one of the following documents D3, D6, K3

Starting from D4/D4a, the subject-matter of claim 1 differs from D4/D4a in that the sheet of homogenised tobacco material is crimped.

- 3.10.5 According to appellant 2, the problem to be solved is how to make the sheet of homogenised tobacco material easier to gather.

(i) Appellant 2 is of the opinion that as D3 discloses on page 6, lines 58-61:

*"The web material is typically provided with a plurality of embossed lines parallel to the machine direction so that the web gathers in a more uniform pattern",*

the skilled person would use the sheet of homogenised material of D3 in the arrangement of D4 arriving at the claimed invention.

(ii) Furthermore, D6 (column 10, lines 28-44) discloses:

*"The commercial equipment is advantageously modified or adapted so that a scoring or embossing of the paper is carried out before any gathering occurs. This procedure eliminates large void spaces and provides a substrate rod with a more uniform longitudinal channel architecture (see, FIG. 4).*

*It has been discovered that the degree of embossing is directly proportional to the pressure drop of the finished substrate rod. As described above, the pressure drop of the substrate element can be used to*

*control the overall pressure drop of the finished cigarette. If more pressure drop is required, the substrate rod pressure drop can be increased by increasing the degree of embossing. Likewise, if other components contribute a higher pressure drop than desired, the pressure drop contributed by the substrate can be reduced, by decreasing the amount of embossing".* Accordingly, the skilled person would use the sheet of homogenised tobacco material from D6 in the arrangement of D4, arriving at the invention of claim 1.

(iii) Finally according to appellant 2, K3 discloses embossing and then manipulating a sheet formed by a casting process. From the skilled person's common general knowledge and from the description of the process in column 2, lines 45 to 50 of K3, embossing the sheet will result in the gathering being easier. Accordingly, the skilled person would use the sheet of homogenised tobacco material from K3 in the arrangement of D4, arriving thereby at the subject-matter of claim 1.

3.10.6 The Board is not convinced. Starting from D4, the skilled person would not modify the folding of the sheet of homogenised tobacco material formed by a casting process. Indeed in D4, the folding of the sheet of homogenised tobacco material has been chosen for its convenience to manufacture (see paragraph [0032] of D4/D4a) and the air channel thereby created (see paragraph [0035]).

But even if the skilled person would start from D4/D4a, and combine its teaching with the teaching of D3, D6 or K3, the skilled person would not arrive at the subject-matter of claim 1.

(i) D3 does not disclose crimping a sheet of homogenised tobacco material formed by a casting process but discloses crimping tobacco paper. Using the crimped sheet of D3 in the rod of D4/D4a would not lead to the claimed invention.

(ii) D6 discloses embossing nonwoven and paper webs. The skilled person starting from a sheet of homogenised tobacco material formed by a casting process, which is known to be fragile, would not consider the embossing applied to nonwoven and paper webs which have different properties.

(iii) In K3, the sheet of homogenised tobacco material formed by a casting process is embossed, compacted and bonded, which will result in reduced air channels, affecting thereby the pressure drop of the rod. Furthermore in D4, the carbonaceous heat source part and the flavour generating source part are arranged adjacent and folded together. Applying the embossing to the sheet will affect both parts and may lead to undesired carbon dust.

3.10.7 Further inventive step objections against claim 1 are not taken into account under Article 12(2) and (4) RPBA 2007.

During oral proceedings appellant 2 announced that they maintained their objections referred to on page 8, 5th paragraph of their statement of grounds of appeal, especially the ones starting from document K2.

Paragraphs 5 of page 8 of the statement of grounds of appellant 2 reads:

*"The Opponent also maintains the arguments of the submission of 22 November 2018 and the Oral Proceedings*



*that claim 1 of Auxiliary Request 1 lacks an inventive step over various combinations of documents K2, K3, K4, D3, D4, D6, D7, D8 and the common general knowledge of the skilled person".*

The above statement is general and refers to the opposition proceedings submissions without specifying the inventive step objections, in particular which document is taken as the closest prior art and which document or documents are combined with the closest prior art. In the subsequent paragraphs of the statement of grounds of appeal, appellant 2 states that K2, D4 and K3 are appropriate starting point just as D3, but only develops an inventive step reasoning starting from D4 in combination with D3, D6 or K3 (inventive step objections which have been dealt above).

Appellant 2 has left it entirely to the Board and appellant 1 to conjecture how the cited documents should be combined to arrive in an obvious manner to the subject-matter of claim 1.

Therefore, the Board considers that the inventive step objections in view of documents K2, K3, K4, D3, D4, D6, D7, D8 and the common general knowledge of the skilled person submitted with the statement of grounds of appeal do not meet the requirements of Article 12(2) RPBA 2007, according to which the statement of grounds of appeal shall set out clearly and concisely the reasons why it is requested that the decision under appeal be reversed, amended or upheld, and should specify expressly all the facts, arguments and evidence relied on, and thus are not taken into consideration in accordance with Article 12(4) RPBA 2007, last sentence.

4. To conclude, the appellant 2s' objections regarding the maintenance of auxiliary request 2 (corresponding to

auxiliary request 1 maintained by the opposition division) are to be dismissed.

**Order**

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

The appeals are dismissed.

The Registrar:

The Chairman:



A. Vottner

G. Pricolo

Decision electronically authenticated