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**Datasheet for the decision of 30 April 2025**

**Case Number:** T 2514/22 - 3.2.04

**Application Number:** 15716560.6

**Publication Number:** 3145338

**IPC:** A24F47/00

**Language of the proceedings:** EN

**Title of invention:**
AEROSOL-GENERATING ARTICLE WITH INTERNAL SUSCEPTOR

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

**Opponents:**
Nicoventures Trading Limited
JT International S.A.

**Headword:**

**Relevant legal provisions:**
EPC Art. 56
RPBA 2020 Art. 12(3), 12(4), 12(5), 12(6), 13(2)

**Keyword:**
Inventive step - ex post facto analysis
Amendment to case - amendment within meaning of Art. 12(4) RPBA 2020
Late-filed objection - should have been submitted in first-instance proceedings (yes)
Amendment after summons - exceptional circumstances (yes)

**Decisions cited:**

**Catchword:**

Europäisches Patentamt
European Patent Office
Office européen des brevets

**Beschwerdekammern**

**Boards of Appeal**

**Chambres de recours**

Boards of Appeal of the
European Patent Office
Richard-Reitzner-Allee 8
85540 Haar
GERMANY
Tel. +49 (0)89 2399-0

**Case Number: T 2514/22 - 3.2.04**

# D E C I S I O N
# of Technical Board of Appeal 3.2.04
# of 30 April 2025

| | |
|---|---|
| **Appellant:** (Opponent 1) | Nicoventures Trading Limited<br>Globe House<br>1 Water Street<br>London WC2R 3LA (GB) |
| **Representative:** | Brown, Alexander Edward<br>Venner Shipley LLP<br>200 Aldersgate<br>London EC1A 4HD (GB) |
| **Appellant:** (Opponent 2) | JT International S.A.<br>8 rue Kazem Radjavi<br>1202 Geneva (CH) |
| **Representative:** | Karl, Christof<br>Bardehle Pagenberg Partnerschaft mbB<br>Patentanwälte, Rechtsanwälte<br>Prinzregentenplatz 7<br>81675 München (DE) |
| **Respondent:** (Patent Proprietor) | Philip Morris Products S.A.<br>Quai Jeanrenaud 3<br>2000 Neuchâtel (CH) |
| **Representative:** | Grünecker Patent- und Rechtsanwälte<br>PartG mbB<br>Leopoldstraße 4<br>80802 München (DE) |
| **Decision under appeal:** | **Interlocutory decision of the Opposition Division of the European Patent Office posted on 20 September 2022 concerning maintenance of the European Patent No. 3145338 in amended form.** |

**Composition of the Board:**

| | |
|---|---|
| **Chairman** | A. Pieracci |
| **Members:** | S. Hillebrand |
| | M. Millet |

## Summary of Facts and Submissions

I. The appeals were filed by opponents 1 and 2 against the interlocutory decision of the Opposition Division finding that the patent in suit in an amended form according to an auxiliary request 2 met the requirements of the EPC.

In particular, the Opposition Division held that
- the amended claims were clear;
- the patent, on the basis of this request, disclosed the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art;
- the subject-matter of all independent claims 1 - 4, 6, 8 and 18 was novel with regard to the disclosure of D4/D10, of D12 and of D21a;
- the subject-matter of all independent claims involved an inventive step when starting
from figure 8 of D4/D10 alone;
from figure 10A of D4/D10 alone;
from D3 and considering common general knowledge or D4;
from D21a
from D12
from D13 and from D14 (as D3, i.e.combined with D4).

II. In a communication pursuant to Article 15(1) RPBA, the Board expressed the preliminary opinion that independent claims of the main request (as upheld) and of an auxiliary request filed with the proprietor's reply to the appeals did not involve an inventive step.

III. Oral proceedings were held before the Board in form of a videoconference with all parties attending remotely.

IV. Both appellants (opponents 1 and 2) request that the decision under appeal be set aside and that the patent be revoked.

The respondent (proprietor) requests that the appeals be dismissed (main request), in the alternative that the decision under appeal be set aside and that the patent be maintained on the basis of one of auxiliary requests 1 - 3 of which auxiliary request 1 was filed with the reply to the appeals and auxiliary requests 2 and 3 were filed with letter of 27 March 2025 in response to the communication of the Board pursuant to Article 15(1) RPBA.

V. Independent claim 1 of the main request reads as follows (numbering of claim features added by the Board):

**1A'** An aerosol-generating system comprising an electrically-operated aerosol-generating device (200) having an inductor (210) for producing a fluctuating electromagnetic field and
**1A** an aerosol-generating article (10) comprising
**1B** a plurality of elements assembled in the form of a rod having a mouth end (70) and a distal end (80) upstream from the mouth end,
**1C** the plurality of elements including an aerosol-forming substrate (20)
**1D** located at or towards the distal end of the rod,
**1E** in which an elongate susceptor (25),
**1F** having a thickness between 10 and 100 micrometres,
**1G** is arranged substantially longitudinally within the rod and
**1H** in thermal contact with the aerosol-forming substrate (20),
**1I** wherein the elongate susceptor (25) is located within the aerosol-forming substrate (20),

**1J** and wherein the elongate susceptor (25) is positioned in a radially central position within the rod and
**1K** extends along the longitudinal axis of the rod,
**1N** the aerosol-generating article (10) engaging with the aerosol-generating device (200) such that the alternating magnetic field produced by the inductor (210) induces a current in the susceptor (25), causing the susceptor (25) to heat up.

Independent claim 2 corresponds to independent claim 1 apart from the features 1I, 1J, 1K relating to the position of the susceptor with regard to the substrate and the article being replaced by feature
**1L** wherein the elongate susceptor (25) is shaped as a pin, rod, or blade.

Independent method claims 3 and 4 relate to a
**1A''** Method of using
**1A** an aerosol-generating article (10) comprising the features of claim 1 (1B - 1K) and claim 2 (1B - 1H, 1L), respectively, and
**1O** comprising the steps of positioning the article relative to an electrically-operated aerosol-generating device such that the elongate susceptor of the article is within a fluctuating electromagnetic field generated by the device,
**1P** controlling the field strength of the fluctuating electromagnetic field such that power dissipated in the elongate susceptor is between 5 and 6 Watts for a first period of time, and changing the field strength of the fluctuating electromagnetic field such that power dissipated in the elongate susceptor is between 1.5 and 2 Watts for a second period of time.

Subject-matter of independent claims 6 and 8 is

**1A** An aerosol-generating article (10) comprising the features of claim 1 (1B - 1K) and claim 2 (1B - 1H, 1L), respectively,
**1M** wherein the aerosol-forming substrate (20) is in the form of a rod comprising a gathered sheet of aerosol-forming material.

Claim 18 is directed to a method of producing an aerosol-generating article (10) according to any of claims 6 to 15.

The claims of auxiliary request 1 correspond to those of the main request apart from the alternative "rod" in feature 1L of claims 2, 4, 8 according to the main request being deleted in corresponding claims 2, 4, 8 of auxiliary request 1, which include thus feature **1L'** wherein the elongate susceptor (25) is shaped as a pin or blade.

Auxiliary request 2 corresponds to auxiliary request 1 apart from independent claims 1 and 6 of auxiliary request 1 being deleted and the numbering, back-references and subject-matter of the remaining claims being adapted to the deletion.

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

D3: WO 2014/048745 A1
D4: US 5 613 505 (corresponding to
D10: WO 95/27411 A1)
D4a: US 5 388 594 (cited in D4)
D6: WO 2015/177257 A1
D8: WO 2015/177252 A1
D9: WO 2015/131058 A1
D11: WO 94/06314 A1
D12: WO 2013/178768 A1

D13: EP 2 340 730 A1
D14: US 2007/0102013 A1
D15: EP 2 609 821 A1
D16: WO 2013/102609 A1
D17: WO 2011/034723 A1
D18: WO 2008/121610 A1
D19: WO 2013/098397 A2
D21a: DE 26 20 299 A1
D21b: DE 26 20 299 B2
D23: US 3 065 755.

VII. The appellants' arguments in writing can be summarised as follows:

For novelty of the main request,
opponent 1 relies on figure 8 of D4 (claim 2),
opponent 2 relies on figure 10A of D4 (claims 1, 2, 6, 8, 18),
figure 8 of D4 (claims 2, 8, 18),
D4 (claims 3, 4).

For inventive step of the main request,
opponent 1 relies on figure 10A of D4 (claims 1-4),
D3 combined with D4 (claims 1-4, 8),
figure 8 of D4 combined with D3 (claim 2)
D21a combined with D19 (claims 6, 8)
D3+D4 combined with D19 (claims 6, 8),
opponent 2 relies on figure 10A of D4 (claims 1 and 6),
figure 8 of D4 (claims 1 and 6)
D12 (claim 6),
D13 combined with D4 (claims 6, 8)
D14 combined with D4 (claims 6, 8)

Furthermore, the invention as claimed is not considered to be sufficiently disclosed to be carried out by a person skilled in the art.

For novelty of claim 2 according to auxiliary request 1,

opponent 1 relies on D4,
opponent 2 relies on figure 10A of D4.
For inventive step of claim 2 according to auxiliary request 1, opponent 1 relies on
D4 combined with D3,
D3 combined with D4,
D3 or D4 combined with any of D6, D8, D9, D11, D12, D13, D14, D15, D16, D17, D18, D19, D21a, D21b, D23.
For inventive step of claim 8 according to auxiliary request 1, opponent 1 relies on
D3, D4, D19 or D21a in combination with any of D3, D4, D6, D8, D9, D11, D12, D13, D14, D15, D16, D17, D18, D19, D21a, D21b, D23.
Furthermore, auxiliary requests 1 and 2 should not be admitted to appeal proceedings for being late filed without any justification or exceptional circumstances being present and auxiliary request 1 for violating Rule 80 EPC.

The respondent's arguments can be summarised as follows:
The subject-matter of all independent claims is new and inventive, since none of the cited documents discloses a susceptor in rod, pin or blade shape and/or located in the centre of an article comprising a gathered sheet of aerosol generating material. The claimed susceptor thickness (feature 1F) is adapted for carrying out the method steps of claims 3 and 4 of the main request.
Auxiliary request 1 is an appropriate reaction to the appeals and auxiliary request 2 overcomes all objections confirmed by the Board in the communication according Article 15(1) RPBA by mere deletion of claims thereby reducing the complexity of the case. Both auxiliary requests should be admitted.

## Reasons for the Decision

1. The appeals are admissible.

2. **The patent and its technical background**

2.1 The patent deals with an aerosol-generating system comprising an article with an aerosol-forming substrate and a device into which the article is inserted. The device has an inductor producing an alternating magnetic field, which induces a current in an elongate susceptor located within the article such that the substrate is heated and aerosols are generated.

2.2 Independent claims 1 and 2 of the main request are directed to the system, corresponding independent claims 3 and 4 to a method of using the article with the system, corresponding independent claims 6 and 8 to the article as such and claim 18 to a method of producing the article. Only features of the article itself seem to be decisive for novelty and inventive step of the system, the remaining features conventional and known from prior art devices.

2.3 The susceptor has a thickness between 10 and 100 micrometers (all independent claims, feature 1F).

2.4 The subject-matter to be decided upon can be grouped in the following alternatives.

Alternative 1 - independent claims 1, 3, 6 of the main request and of auxiliary request 1
The susceptor is located within the substrate (feature 1I) and positioned in a radially central position within the rod-shaped article (feature 1J).

Alternative 2 - independent claims 2, 4, 8 of the main request
The susceptor is shaped as rod (or pin or blade, blade being shown in the sole embodiment of the patent, figure 1), feature 1L.

Alternative 2' - independent claims 2, 4, 8 of auxiliary request 1
The susceptor is shaped as pin or blade, feature 1L'.

## 3. Main request - claim interpretation

3.1 Feature 1L

A rod shape is mainly characterised by an essentially straight extension and cylindrical uniformity as well as a certain minimum relationship between length and diameter leading to a "slim" shape, which appears for instance to be obtainable with a ratio of 4. A rod is not necessarily solid, but can be hollow as well. Also synonyms for "rod" like pole, shaft and bar exist in hollow forms. A susceptor in form of a hollow rod is not excluded from claim 1 because only "the shape" in terms of the contour of a rod was claimed as argued by the respondent. The shape of a rod is built by its entire surface. Even if it was not, defining an object only by its outer contour includes all possible inner structures rather then to exclude them. Furthermore, the claimed article itself is also defined as comprising a plurality of elements assembled "in the form of a rod" (feature 1B) within which rod the elongated susceptor is arranged (feature 1G). The Board is unable to see a difference between a form of a rod and a shape of a rod. Figure 1 of the patent shows a hollow section within the rod-shaped article. A rod can thus be a hollow object in the sense of the patent.

Compared to a rod, the alternative pin shape for the elongated susceptor has a relatively smaller diameter. Other than in a rod shape, which might be hollow or solid, a susceptor in a pin or blade shape is not hollow as suggested by appellant 1 even if pins and blades for other applications might be hollow. The person skilled in the art can differ the various claimed alternatives for the shape because "pin and blade shaped suceptors are common general knowledge and also known from" an impressive number of cited documents (see their letter of 22 December 2023, page 11, penultimate paragraph and bridging paragraph of pages 7/8), such as D6 (pin 21 in figure 3, blade not shown), D8 (blade 20 in figure 2), D11 (pins 95, 104 in figures 3, blade 43 in figure 3), D12 (blade 2100 in figure 4), D13 (pin 103 in figures 2, 3), D15 (blade 90 in figures 1, 3A, pin and rod not shown), D16 (blade 14 in figure 2, pin not shown), D19 (blade and rod not shown), D21a (pin 13 in figure 1a, 1b). Even if a considerable number of these citations do actually not relate to susceptors but to resistive heating elements, the Board agrees that the skilled person is familiar with various basic susceptor shapes.

3.2 Features 1J, 1K

The elongated susceptor is in a position, which is *radially* central within the rod-shaped article, i.e. a position, which is central with regard to the radius of the rod or *the* longitudinal axis of the rod. It is not claimed that the susceptor is in "a radial central position" in the sense of one amongst a plurality of more or less central positions and extends along one of a plurality of longitudinal axes of the rod. Neither is it claimed that the susceptor is present at *the* radially central position in the sense that susceptor material is located in the centre of the rod. This must

only be the case for a monolithic susceptor, e.g. a blade or pin. A hollow susceptor such as a hollow rod cannot even be located directly in the rod centre if it takes a radially central position, but has to surround this centre in order to do so. Therefore articles having a susceptor located centrally within the cross-section of the rod such that they are centred with regard to the longitudinal axis of the rod are encompassed by independent claims 1, 3, 6, 18.

4. **Main request - sufficiency of disclosure**

4.1 With regard to the reason for opposition under Article 100b) EPC, the appellants referred in oral proceedings to their submissions in writing. Appellant 1 joined the argumentation presented by appellant 2.
Appellant 2 had submitted in their statement of grounds that the patent did not disclose how to insert a thin elongate susceptor having a thickness between 10 and 100 micrometers in an aerosol substrate (combination of features 1F and 1I) and in particular to position it in a radially central position (feature 1J). As appellant 2 had put forward the second objection (central positioning) for the first time during oral proceedings in opposition, the Opposition Division had not admitted it for being late filed and not prima facie relevant, section 5.3 of the decision under appeal. In section C.III of their appeal brief appellant 2 clarified that the second objection was only a further elaboration of the first objection already on file, but did not substantiate it.

4.2 The Board has preliminarily concluded in section 1.3 of the communication pursuant Article 15(1) RPBA that it "*cannot admit this second objection, either under Article 12(6), 1st paragraph or under Article 12(3),*

*(5) RPBA.*
*If the second objection was only an elaboration and depending on the first objection, the conclusion for the first one would anyway also apply for the second one.*"
On the first objection, the Board agreed in section 3.2 "*with the Opposition Division that the skilled person is able to realise these steps and features with conventional means and measures, if need be with an additional support or guide for the susceptor during insertion, sections 12.1, 5.2 of the impugned decision.*"

4.3 After further consideration the Board confirms that the patent discloses the claimed invention in a manner sufficiently clear and complete to be carried out by a person skilled in the art, Article 100b) EPC. Since the Board was not convinced that the second objection was a mere elaboration of the first one without adding a new aspect of carrying out the invention, it did not admit it as announced in the communication. Following the approach of appellant 2 would on the other hand have led to the conclusion that the second aspect was sufficiently disclosed as well.

5. **Main request - inventive step with regard to D4**

5.1 It is common ground that D4 discloses an aerosol-generating system comprising an electrically-operated aerosol-generating device having an inductor 10, 100 for producing a fluctuating electromagnetic field, an aerosol-generating article C and a susceptor, the aerosol-generating article engaging with the aerosol-generating device such that the alternating magnetic field produced by the inductor induces a current in the susceptor, causing the susceptor to heat up, see

figures 1 to 5.
In the embodiments of D4, an article in form of a hollow cylindrical cigarette C disclosed in D4a is employed, whose inner void might also be filled, column 8, lines 28 - 31, 43 - 46, 64 to column 9, line 1; column 11, lines 27 - 32. The cigarette is made from laminates shown in figures 8 to 10, which are rolled to form a cylindrical layer of tobacco flavour material TM and a paper overwarp 310, column 9, lines 19 - 22. According to the particularly preferred embodiment of figures 10A, 10B, an integral susceptor layer 400 is embedded in the tobacco layer TM so that it must be in the shape of a cylinder wall within the cylindrical tobacco layer of the cigarettte C (column 10, lines 44 - 51), the article and the suceptor sharing a common longitudinal axis. The suceptor 400 is thus located within the aerosol-forming substrate, within the article's cross-section and centred with regard to the longitudinal axis of the article. Features 1I, 1J and 1K are realised since these neither require a specific diameter or wall thickness of the cylindrical susceptor 400, nor a susceptor arrangement which is distanced and separated or in some other way so "distinct" from the aerosol generating material, that the integral susceptor layer 400 would be excluded.

5.2 However, no susceptor thickness is given in the passage of D4 describing the embodiment of figures 10 (column 9, line 44 - column 11, line 32) and no direct link to the thickness range previously mentioned in the context of figure 8's embodiment (0.25 to 0.5 mil or 6.35 to 12.7 micrometer, column 10, lines 4/5) established. Therefore, this range cannot be considered as directly and unambiguously disclosed for the embodiment of figures 10 as well and the subject-matter of claim 1 differs from it in feature 1F.

When putting into practise the embodiment of D4, figure 10A, an appropriate thickness of the susceptor layer has to be determined. Or, as worded in paragraph [0011] of the patent, the susceptor has to be configured for dissipating an appropriate amount of energy, see also section 14.2.2 of the decision under appeal.
This can be considered as the problem to be solved.

5.3 According to the general teaching in column 9, lines 48 - 61 of D4, an optimised magnetic field and conversion efficiency can be reached with a metal sheet having a thickness of 2 mil or 50.8 micrometer. But higher thickness also means higher thermal load or mass and thus lower rate of thermal rise. On the other hand, lower thickness allows only for lower conversion of the magnetic field to heat energy. At least for the embodiment of figure 8, a thickness between 6.35 and 12.7 micrometer is recommended as a compromise between these competing goals, which contributes to solve the problem.
The effects of the suceptor layer of figure 10A compared to that of figure 8 are explained in column 10, line 62 to column 11, line 3: higher flexibility, lower thermal mass, faster thermal response, i.e. higher rate of thermal rise. Such conclusions can only be drawn when comparing differently designed susceptor layers 300, 400 having the same type of material and a thickness of the same magnitude.

5.3.1 In the respondent's view, the above teaching of D4 obviously leads the skilled person to choosing a relatively low thickness for the susceptor of figure 10A, e.g. the lowest disclosed value of 0.25 mil or 6.35 micrometer, in order to realise the above-mentioned technical effects, in particular to provide a

susceptor layer of high flexibility and low mass. Furthermore, such a choice was corroborated by a comparision of figures 8 and 10A showing both laminates for producing a cigarette which only differed from each other in the thickness of the susceptor layer 300, 400, whilst the respective thickness of paper and tobacco layers 310, TM was the same in both figures. This pointed towards a considerably lower thickness for the susceptor 400 of figure 10A which was then clearly outside of the claimed range. Such relatively thin suceptor layers fitted to the concept of D4's device which was different from that of the patent in suit. In D4 only small areas of the aerosol forming substrate were heated one after the other whereas according to the patent the entire susceptor had to be heated up swiftly in a first period of operation which required high power, but then the higher thermal mass of the thicker susceptor allowed for maintaining operation temperature with low power supply.

5.3.2 The Board disagrees.
Higher flexibility and lower mass do not have to be realised by choosing a low thickness for the susceptor 400 of Fig. 10A, 10B in D4. They are already provided by the different structure of the susceptor layer 400, in particular "due to the discontinuities, perforations, or openings" 410 of the susceptor 400 which is configured as "screen, mesh or perforated foil" (column 11, lines 45 - 51, 62 - 67). The positive effects of the discontinued layer 400 on thermal mass and rate of temperature rise allow to the contrary to choose a thickness at the upper border of the range given for the layer of figure 8 or even beyond towards an optimum thickness of 50.8 micrometer, thereby improving magnetic field and conversion efficiency without compromising thermal mass compared to figure 8.

Such obvious choice would lead to a thickness within the claimed range (feature F).
The skilled person would not conclude otherwise from a comparison of the drawings of figures 8 and 10A. These are purely schematic, unrealistic and inconsistent with regard to the illustrated dimensions. The tobacco layer TM is depicted as having only twice the thickness of the paper layer 310 which is in turn about as thick as the susceptor layer 300 (6.35 - 12.7 micrometers), although it should roughly have the double thickness. Therefore, not even relative dimensions can be derived from figures 8 and 10A.
Since all of the above considerations have been made on the basis of technical information given in D4 alone, the thickness values for the susceptor layer 400 resulting therefrom should be compatible with D4's method of operation. Nevertheless there is still an overlap between the lower border of the claimed thickness range and the upper border of the thickness range obvious from D4. It might well be that even higher thickness values are suitable for the method of operation according to the patent. However, claim 1 is neither limited to method steps, nor to a range of thickness starting only at higher values such as 15 or 50 micrometer.

5.4 By contrast, independent claims 3 and 4 are directed to a method of using an aerosol article comprising features 1B - 1H, in particular having a susceptor with a thickness between 10 and 100 micrometers (feature 1F) and they contain such method steps.
Although the Opposition Division has seen inventive step of claims 1 and 3, 2 and 4 for the same respective reasons relating to the article alone, appellant 1 has addressed method step 1P when objecting lack of inventive step of claims 3 and 4 in sections 5.6 and

5.7 of their statement of grounds. Consequently, the Board has preliminarily taken position on the question in section 5.2 of its communication according to Article 15(1) RPBA as follows:
"*Feature 1P of method claims 3 and 4 enables rapid heating to and subsequent maintenance of operating temperature, saving energy and avoiding overheating, paragraph [0091] of the patent.*
*The problem to be solved can thus be considered to provide a method for efficiently operating the system. Since D4 does not seem to suggest feature 1P, the method of claims 3 and 4 involves an inventive step with regard to the embodiment of figure 10A.*"

As the appellants only referred to their written submissions in oral proceedings and confirmed their written arguments against inventive step of claims 3 and 4, the Board maintained its preliminary opinion after a further review.

5.5 Therefore, the subject-matter of claims 3 and 4 according to the main request involves an inventive step in the sense of Article 56 EPC with regard to the cited prior art, but the subject-matter of claim 1 does not.

6. **Auxiliary request 1 - admission**

6.1 The respondent filed auxiliary request 1 originally with their reply to the appeals as third request (3. With letter of 27 March 2025 they requested "subsequently to requests 1) to 2) made with the Appeal Reply.. 3) .. to maintain the patent in further amended form" of an auxiliary request 2 filed with that letter. At the beginning of the oral proceedings, when being made aware of an apparent change of at least the order

of the auxiliary requests, the respondent clarified that their order was still according to their numbering and the reference to requests 1) to 2) in their letter an oversight. It was intended to refer to requests 1) - 3) instead.

6.2 Appellant 1 submits that auxiliary request 1 has been replaced by auxiliary request 2 and thus withdrawn with letter of 27 March 2025. Since it was only re-introduced at the beginning of the oral procedure, it should not be admitted under Article 13(2) RPBA, neither a change of mind nor an error qualifying as exceptional circumstance.

The Board does not share this view.
In the absence of an explicit withdrawal, a withdrawal of a request cannot simply be presumed (CLB, 10th edition, III.I.5). In the case at hand, the numbering of the requests supports the explication of the respondent that the reference to requests 1) to 2) was made inadvertently. Furthermore, the letter of 27 March 2025 keeps referring to auxiliary request 1 and the amendments in auxiliary request 2 are highlighted in comparison to auxiliary request 1. Even if the number and order of the respondent's requests was temporarily not entirely clear, auxiliary request 1 could therefore not be considered as having been filed for the first time in oral proceedings and its admission as being subject to the provisions of Article 13(2) RPBA.

6.3 The appellants request further not to admit auxiliary request 1 because it was not substantiated and should have already been presented in opposition proceedings.

In its annex to the summons, the Opposition Division

considered the independent claims of a previous main request to comply with the provisions of the EPC and admitted late-filed document D21a as well as the main request (previous auxiliary request 0.3 promoted to 2) which was filed in response thereto and finally also held allowable in the decision under appeal. There was thus no need for the respondent to file a further auxiliary request corresponding to auxiliary request 1 already in opposition proceedings. The provisions of Article 12(6), 2nd paragraph RPBA are therefore not pertinent for the present case.
A respondent-proprietor has, however, the right to a commensurate reaction to appeals against a decision to uphold their patent in amended form. The deletion of one of three alternatives for the elongated susceptor's shape, a rod, in independent claims 2, 4 and 8 of auxiliary request 1 represents such an appropriate and timely reaction to the appeals. Moreover, the respondent has substantiated the amendments in auxiliary request 1 in section III of their reply to the appeals. The appellants had not contested novelty of the alternatives "pin" or "blade" in their statements of grounds. The amendments were thus obviously suitable for overcoming novelty objections against the rod alternative. It is up to the respondent in which way they substantiate a request to the satisfaction of the Board, even if this way did not comply with requirements of sufficient substantiation set up by the appellants, such as the provision of a definition of the terms rod, pin and blade. It is up to the appellants to demonstrate that and why features of the prior art could be considered as rod, pin or blade.

6.4 For the above reasons, the Board has admitted auxiliary request 1 to the appeal proceedings under Articles

12(2) to (5) RPBA.

7. **Auxiliary request 1 - Rule 80 EPC**

As follows from point 3.1, above, some susceptor forms have been clearly excluded from claims 2, 4, 8 by the deletion of the alternative "rod". For instance, the skilled person having background knowledge of differently shaped susceptors would not classify the susceptors resulting from the laminates according to figures 8 and 10 of D4 as being pin-shaped or blade-shaped. It does not matter whether there are some overlaps or "grey zones" between a rod shape and a pin shape as well as between a pin shape and a blade shape, which are still covered by these claims. That the scope of the claims has been limited to some extent represents an amendment occasioned by the ground of opposition according to Article 100a) EPC. Consequently, auxiliary request 1 meets the requirements of Rule 80 EPC.

8. **Auxiliary request 1 - inventive step**

8.1 In independent claim 2, the alternative rod known from D4 has been deleted so that its subject-matter differs from D4, figures 8 and 10A in the shape of the susceptor 300, 400.
The patent is silent about any specific technical effects of the three different shapes disclosed therein. They differ in contour and thermal mass and can therefore provide corresponding advantages in ease of manufacturing and efficiency of operation, which depend on these criteria as set out in points 4.2, 5.3, above, and of which the skilled person is well aware of. The problem to be solved can thus be considered as

providing an alternative susceptor shape.

8.2 From the laminates shown in figures 8 and 10 of D4 nothing but rod-shaped susceptors can be produced. The only variable parameters are the diameter, the length, the thickness and the material of the susceptor. Changing completely the structure of the laminates and the method of production according to D4 in order to obtain a pin- or blade-shape of the susceptor appears to be only motivated by hindsight.
Therefore, the subject-matter of claim 2 involves an inventive step when starting from D4 as closest prior art.

8.3 D21a, figures 2a, 2b discloses a conventional filter cigarette 20 having a hollow rod-shaped heat conductor 23 arranged at the radially inner side of tobacco material in order to reduce carbon monoxide, page 6, fourth and fifth paragraph, page 7, penultimate paragraph - page 8, second paragraph and page 11, second paragraph to page 12, first paragraph. The thickness of the heat conductor material is 14 micrometer. Albeit not foreseen for this purpose, the heat conductor made from aluminium foil can serve as susceptor for inductive heating.
But only the knowledge of the patent can lead to introduce a susceptor not envisaged by D21a into the definition of an objective problem to be solved. If the problem was here to provide an alternative heat conductor, a pin 13 is shown in figure 1a, 1b, but no thickness value is disclosed for this embodiment.
Since the subject-matter of claim 8 can thus not be obtained from D21a in an obvious manner it involves an inventive step over the cigarette of D21a, figure 2.

8.4 For other lines of argumentation, the appellants referred to their written submissions. After a further review the Board maintains its preliminary opinion as expressed in the communication pursuant to Article 15(1) RPBA.

8.4.1 In sections 5.3.2 - 5.3.4 and 8.3 of this communication the Board had considered D3 and D12 to D14 as less promising starting points for the following reasons.
"*5.3.2 It appears to be impossible or at least based on hindsight to modify the production process of D12 such that a centrally located and/or rod shaped susceptor is obtained.*

*5.3.3 D3 (page 4, lines 12 - 36, figure 1) appears to disclose a central, rod-shaped susceptor 5 and therefore the same claim features 1I, 1J and 1K as figure 10A of D4. Other than in D4, there is, however, no comparison with or link to thickness values disclosed for a similar embodiment as represented by figure 8 for figure 10A of D4. It appears therefore to be less likely than in case of the embodiment of figure 10A that the skilled person would apply the specific teaching of D4 to the article of D3 in order to solve a corresponding problem (determining thickness / configuring for dissipating enough energy).*

*5.3.4 The same seems to apply when starting from D13 or D14.*
*Moreover, the aerosol-generating article does not appear to comprise a substrate, in which a susceptor is located and activated only by engagement of the article with an aerosol generating device (features 1A - 1H, 1N, 1O). Their susceptor seems to be part of the device.*"

8.4.2 In section 1.2 of the communication, the Board considered combinations with D19.

"*It appears that appellant (opponent) 1 has relied in sections 5.9 to 5.13 of their appeal brief for the first time on a combination of various documents with D19, thereby introducing an amendment in the sense of Article 12(2), (4) RPBA without identifying the amendment or providing reasons for submitting it. Moreover, the Board shall as a rule not admit objections, which should have been submitted in opposition proceedings, unless the circumstances of the appeal case justify their admittance, Article 12(6), 2nd paragraph RPBA. Due to the absence of such circumstances the Board does presently not intend to admit these new combinations.*"

Since the Board acknowledges pin-shaped and blade-shaped susceptors as belonging to the general knowledge of the skilled person, see point 3.1, above, there was no need to fall back on D19 as combination document which does anyway not disclose suceptors, but resistive heating elements (see page 5, last paragraph).

8.5 For the above reasons, the subject-matter of claims 2 and 8 according to auxiliary request 1 involves an inventive step in the sense of Article 56 EPC. Since claims 1, 3 and 4 of auxiliary request 1 correspond to claims 1, 3 and 4 of the main request (with only the alternative "rod" being deleted in claim 4), the same conclusions on inventive step are valid, in particular that the subject-matter of claim 1 does not involve an inventive step, but the method of claims 3 and 4 does.

9. **Auxiliary request 2 - admission**

9.1 Auxiliary request 2 is an amendment to the respondent's case for the simple reason that on the basis of the preceding conclusions auxiliary request 1 cannot be granted but auxiliary request 2 could be. According to Article 13(2) RPBA auxiliary request 2 can therefore only be taken into account if there were exceptional circumstances. This is presently the case.

9.2 The amendment consists basically of deleting independent claims 1 and 6 of auxiliary request 1. All objections raised against the remaining independent claims 1 - 3 and 6 of auxiliary request 2 have already been discussed for the corresponding claims 2 - 4 and 8 of auxiliary request 1 and decided upon by the Board with the result that these objections were not justified. Appellant 1 reminded the Board in oral proceedings of an outstanding novelty objection with regard to D4 which they had raised in their letter of 22 December 2023 on page 9, fifth paragraph. However, the Board had already pointed out before in the context of the discussion of auxiliary request 1 that it considered a rod shape, in particular that of the D4 susceptors, not to be the same as a pin shape and a blade shape. The previous conclusions on admission, Rule 80 EPC and inventive step were obviously based on this understanding. Therefore, the Board considered to have implicitly covered this objection against claim 2 of auxiliary request 1 and confirmed its novelty.
It was therefore immediately clear from the course of the proceedings that the patent could be maintained based on auxiliary request 2. This was considered to represent an exceptional circumstance.

9.3 The appellants submit that the amendment opened a fresh case by shifting the focus from claims 1, 2 and 6, 8 of the main request, in particular from the features "rod-shaped" and "central position" to the features "pin" and "blade" and to method steps in claims 2 and 3. Those had never been defended by the respondent or discussed in opposition proceedings.
However, the shift to pin and blade shapes took already place with the respondent's reply to the appeals, namely in auxiliary request 1. Both appellants used the opportunity to argue against auxiliary request 1 and the remaining pin and blade alternatives in writing. The method claims have been part of the main request maintained by the Opposition Division and been commented on in the appeal briefs and the Board's communication, see point 5.4, above.
The substance of the case and the framework of the appeal has therefore not been changed by auxiliary request 2.

9.4 Appellant 2 pointed to further deficiencies of auxiliary request 2 with regard to clarity and extension of scope of protection so that "prima facie allowability" could not be claimed as exceptional circumstance for auxiliary request 2. In particular, it was not clear what the exact difference between the previously claimed rod shape and a pin shape and between the remaining shapes of pin and blade was. No definition of any shape was given in the patent. It was not anymore clear whether the susceptor belonged to the article although this was the case in granted claim 1. Therefore, the scope of claim 1 also extended beyond the patent as granted. All these objections applied for corresponding claims of auxiliary request 1 as well. They were presented for the first time in oral proceedings but if auxiliary request 2 was admitted

they should also be admitted for reasons of procedural fairness.

Neither in their statements of grounds, nor in opposition proceedings the appellants have raised any objection under Articles 84 and 123(3) EPC against claim 2 of the main request (then auxiliary request 2), which corresponds to claim 2 of auxiliary request 1 and to claim 1 of auxiliary request 2 apart from claiming all three alternative shapes rod, pin and blade, see sections 10.2, 10.3, 11.2 of the decision under appeal. In section 11.1 the Opposition Division declared that claim 2 was not open to any clarity objection since it was only composed of claims as granted.
The Board is unable to see how a deletion of one of three alternatives can lead to a lack of clarity of the remaining two which has not been present from the beginning. If there was concern with regard to clarity of any of the terms rod, pin, blade, it should have been expressed in opposition. The same applies for the alleged extension of scope of protection. The relevant wording of the main request is identical.
The possible admission of a late-filed auxiliary request is not per se an exceptional circumstance opening in turn the door for all kind of new objections which could have been submitted from the very beginning of opposition proceedings. Appellant 2 could only rely on the quid pro quo of procedural fairness, i.e. an opportunity to react with new submissions, if the subject of the proceedings had actually changed in some way by the amendments in auxiliary request 2. As set out above, this was not the case.
Therefore, the Board did not admit the new objections under Article 84 and 123(3) EPC raised for the first time in oral proceedings by appellant 2, Articles

12(6), 13(2) RPBA.

9.5 For the above reasons the Board admitted auxiliary request 2 to the proceedings under Article 13(2) EPC.

10. **Auxiliary request 2 - inventive step**

Independent claims 1 - 3 and 6 are identical to claims 2 to 4 and 8 of auxiliary request 1 the subject-matter of which involves an inventive step in the sense of Article 56 EPC, see point 8.5, above.

11. **Auxiliary request 2 - description**

11.1 The respondent adapted paragraphs [0011] and [0024] of the patent's description to the amendments made in the claims, in particular to the deletion of claims 1 and 6 of the main request and of the alternative "rod" in claims 2, 4 and 8 of the main request.
Appellant 2 saw need to change paragraph [0026] as well. The Board is not aware of any relation between the disclosure of paragraph [0026] and the amendments made in the claims.

11.2 The adapted description complies with the requirements of Article 84 and Rule 42(1)c) EPC.

12. **Result**

With their appeal, the opponents successfully challenge the finding of the Opposition Division that the subject-matter of claim 1 according to former auxiliary request 2 (now main request) involves an inventive step. Accordingly, the corresponding interlocutory decision of the Opposition Division to maintain the patent in amended form of the main request has to be set aside. Because auxiliary request 2 is admitted to the proceedings and meets the requirements of the EPC, in particular that of Article 56 EPC, the patent can be maintained in amended form of auxiliary request 2.

## Order

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

**1. The decision under appeal is set aside.**

**2. The case is remitted to the opposition division with the order to maintain the patent in amended form on the basis of the following documents:**

**Claims:**
**Nr 1 to 18 of auxiliary request 2 filed with letter of 27 March 2025,**

**Description:**
**paragraphs [0001] to [0010], [0012] to [0023],**
**[0025] to [0113] of the patent specification and**
**[0011] and [0024] as filed during oral proceedings,**

**Drawings:**
**Figures 1 to 3 of the patent specification.**

The Registrar: The Chairman:

G. Magouliotis A. Pieracci

Decision electronically authenticated