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Datasheet for the decision of 22 September 2020

Case Number: T 0461/17 - 3.3.01

10768538.0 Application Number:

Publication Number: 2488054

IPC: A24B15/16, A24B15/28, A24F47/00

Language of the proceedings: ΕN

Title of invention:

CONTROL OF PUFF PROFILE

Patent Proprietor:

British American Tobacco (Investments) Limited

Opponent:

Philip Morris Products S.A.

Headword:

Encapsulated aerosol generating agent/BRITISH AMERICAN TOBACCO

Relevant legal provisions:

EPC Art. 54, 56, 83, 123(2) RPBA Art. 12(4)

Keyword:

Main request - novelty - (no)
Auxiliary requests - admitted
Auxiliary request 1 - novelty - (no)
Auxiliary request 2 - allowable



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Case Number: T 0461/17 - 3.3.01

D E C I S I O N
of Technical Board of Appeal 3.3.01
of 22 September 2020

Appellant 1: British American Tobacco (Investments) Limited

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Decision under appeal: Interlocutory decision of the Opposition

Division of the European Patent Office posted on 12 December 2016 concerning maintenance of the European Patent No. 2488054 in amended form.

Composition of the Board:

Chairman A. Lindner
Members: M. Pregetter
L. Bühler

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Summary of Facts and Submissions

- I. European patent No. 2 488 054 is based on European patent application No. 10768538.0, filed as an international application published as WO2011/045609.
- II. Claim 1 of the patent in suit reads as follows.
 - "1. A heat not burn product comprising an encapsulated aerosol generating agent, wherein the release of the aerosol generating agent during use of the product is controlled using different encapsulation materials or different encapsulation approaches to produce a desired puff yield of total particulate matter."
- III. The following documents, cited during the opposition and appeal proceedings, are referred to below:
 - (1) WO2004/041007
 - (1a) US4715390
 - (1b) US3006347
 - (1c) US6325859
 - (3) US5019122
 - (7) US2005/0000531
 - (15) WO2010/125385
- IV. European patent EP 2 488 054 was opposed under Article 100(a), (b) and (c) EPC on the grounds that the claimed subject-matter lacked novelty and inventive step, was

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not disclosed in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art, and extended beyond the content of the application as filed.

In the course of the opposition proceedings, the patent proprietor requested the rejection of the opposition and submitted auxiliary requests 1-3, 3a, 4, 4a, 5, 6, 6a, 7, 8, 8a (auxiliary requests 1 to 8 having been submitted on 20 February 2015 and auxiliary requests 3a, 4a, 6a and 8a having been submitted on 20 October 2016), 9 and 10 (filed during oral proceedings before the opposition division).

The opposition division found that the main request fulfilled the requirements of Articles 123(2) and 83 EPC, but was not novel (Article 54(3) EPC). Auxiliary request 1 (corresponding to auxiliary request 9 mentioned in paragraph 2 above) was found to meet the requirements of the EPC. Former auxiliary request 1 and auxiliary requests 2, 3, 3a, 4, 4a, 5, 6, 6a, 7, 8, 8a were withdrawn at the end of the oral proceedings before the opposition division (point 42 of the minutes).

V. The patent proprietor and the opponent both appealed this decision.

Together with the statement setting out the grounds of appeal, the patent proprietor (appellant 1) resubmitted several of the auxiliary requests which had been withdrawn during the oral proceedings before the opposition division, including former auxiliary requests 1 and 2, which were again numbered as auxiliary requests 1 and 2, respectively.

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Claim 1 of auxiliary request 1 reads as follows.

"1. A heat not burn product comprising an encapsulated aerosol generating agent, wherein the timing of the release of the aerosol generating agent during use of the product is controlled using different encapsulation materials or different encapsulation approaches to produce a desired puff yield of total particulate matter."

Claim 1 of auxiliary request 2 reads as follows.

- "1. A heat not burn product comprising an encapsulated aerosol generating agent, wherein the release of the aerosol generating agent during use of the product is controlled using different encapsulation materials or different encapsulation approaches to produce a desired puff yield of total particulate matter; and wherein the aerosol generating agent is selected from sorbitol, glycerol, propylene glycol, triethylene glycol, lactic acid, diacetin, triacetin, triethyl citrate, isopropyl myristate, methyl stearate, dimethyl dodecanedioate and dimethyl tetradecanedioate."
- VI. Oral proceedings before the board took place on 22 September 2020.
- VII. Appellant 1 (patent proprietor)'s arguments, insofar as they are relevant to the present decision, may be summarised as follows.

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Main request

Amendments

The basis for claim 1 of the main request was found in claims 1 and 2 and on page 7, lines 1 to 3 of the description as filed. The only way of controlling a "release" was by timing it.

Novelty

Document (1) did not define encapsulated aerosol generating agents. The term "aerosol generating agents" was well established in the art and did not include flavourings, which were present in much lower quantities in heat not burn products.

Admission of auxiliary requests 1 and 2

Auxiliary requests 1 and 2 were re-submitted with the statement setting out the grounds of appeal. Taking into account the events during the oral proceedings before the opposition division, especially the making and withdrawing of objections on novelty and added matter, the re-filing of these requests was to be considered a reasonable attempt by the patent proprietor to defend its case.

Auxiliary request 1

Novelty

The same line of argument as given for the main request applied.

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Auxiliary request 2

Novelty

In document (15) a number of selections had to be made. Heat not burn products had to be selected from the various smoking articles. The use of several different types of diluent particles was merely optional (see page 6, line 22). A further selection was to use particles according to the figures. Furthermore, Figures 1 and 2 were schematic. Document (15) did not teach using different wall thicknesses. The figures might potentially show different cross-sections of particles from a single population. There was no disclosure of deliberately using two encapsulation approaches. In addition, there was no disclosure that the particles in any of the figures contained an aerosol encapsulating agent as listed in claim 1 of auxiliary request 2.

The contents of documents (1a), (1b) and (1c) could not be deemed to form part of the disclosure of document (1). It was established case law that for a reference in a document to be taken into account, it had to be specific. This, however, was not the case.

Sufficiency of disclosure

Appellant 2 had not presented any verifiable facts that could raise serious doubts as to the sufficiency of disclosure. The patent in suit described at least one implementation of the claimed subject-matter. The use of the term "different" in the claims did not introduce any ambiguity that would deprive the person skilled in the art of the promise of the invention.

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Inventive step

Document (1) concerned the encapsulation of flavourings, which were employed in far lower quantities than aerosol generating agents. Furthermore, document (1) did not address problems connected to puff yield, so the skilled person would not have consulted it.

The closest prior art was document (3), which disclosed a heat not burn product in which release of the aerosol generating agent was controlled by encapsulation and the provision of a blotting paper, which led to controlled release after the aerosol generating agent was released from the capsules. The differences were the different encapsulation materials or encapsulation approaches. The technical problem was the provision of an alternative heat not burn product in which the release of the aerosol generating agent was controlled during use and which was stable when not in use. Since, due to the presence of the blotting paper, document (3) presented a completely different approach to controlling the release of the aerosol generating agent and did not link any control issues to the fact that the aerosol generating agent was encapsulated, there were no pointers to the solution proposed in the patent in suit. The skilled person would not have combined documents (1) and (3) either.

VIII. Appellant 2 (opponent)'s arguments, insofar as they are relevant to the present decision, may be summarised as follows.

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Main request

Amendments

Claim 1 of the main request stemmed from claims 1 and 2 as filed. In addition, a part of the first sentence on page 7, lines 1-3 of the description as filed had been included. However, any aspects linked to a "timing" of the release of the aerosol generating agent had been omitted. This omission constituted added matter since the application as filed had disclosed different encapsulation materials and/or different encapsulation approaches solely in the context of a timing aspect and there were several possibilities that other parameters, such as type and amount of aerosol generating agent, could control the puff yield.

Novelty

Document (1) already disclosed a heat not burn product comprising capsules containing an aerosol generating agent which was released in a time-controlled manner due to the use of different encapsulation materials. The agent that was being released was a flavouring which added to the aerosol that was formed in the heat not burn product. The flavourings listed in document (1) fell under the definition for the aerosol generating agents in paragraph [0018] of the patent in suit. Furthermore, the term "desired puff yield" defined various possible yields, including very small ones.

Admission of auxiliary requests 1 and 2

Auxiliary requests 1 and 2, which were identical to claim requests withdrawn during the oral proceedings

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before the opposition division, should not be admitted. By withdrawing these requests the patent proprietor avoided a negative decision on them. There was no apparent link between the withdrawal of an added-matter objection against the claim request allowed by the opposition division and the withdrawal of other auxiliary requests.

Auxiliary request 2

Amendments

The same line of argument as given for the main request applied.

Novelty

Document (15) disclosed aerosol generating agents for a smoking article. The smoking article could be a heat not burn product (page 8, lines 17 and 18). Different approaches for encapsulating the aerosol generating agent were described (page 6, line 21 to page 7, line 15, Figures 1 to 3). A list of aerosol generating agents was provided in paragraph 1 of page 3. There was no doubt that the different wall thicknesses and the different amounts of encapsulated agents seen in Figures 1 to 3 resulted from intentionally different encapsulation approaches. In particular, the different wall thicknesses seen in the spherical and symmetric particles depicted in Figure 2 had to be deliberate. Furthermore, page 6, line 23 also pointed to different barrier/encapsulation materials. In addition, it could be seen from Figures 3 and 5 that different binder materials were used and that the pieces were located throughout the smoking article. Combining the distinct

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embodiments of document (15) did not represent several selections.

Document (1) discussed a number of ways of encapsulating the agent. In this context, direct reference was made to documents (1a), (1b) and (1c). The contents of these documents were thus clearly incorporated into document (1). From the disclosure of these documents it was clear that the capsules in document (1) contained aerosol generating agents as listed in claim 1 of auxiliary request 2.

Sufficiency of disclosure

Due to the use of the term "different", and in the absence of any guidance on how "different" two encapsulation materials or approaches had to be, the skilled person would not be able to determine whether or not they were working within the scope of the claims. It had to be taken into account that there were a multitude of factors determining the release time of encapsulated aerosol generating agents. Furthermore, even capsules within the same batch were inherently different from each other on a microscopic level. The skilled person was thus unable to objectively determine whether a given product was actually in line with the teaching of the patent.

Inventive step

Document (1) or (3) could be seen as the closest prior art.

Starting from document (1) the difference was the list of aerosol generating agents. The effect linked to this difference was a higher yield of total particulate

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matter. The technical problem lay in the obtention of a higher level of total particulate matter yield. It was obvious for the skilled person to use any of the agents commonly referred to as aerosol generating agents, which were well known.

Starting from document (3) the difference was the use of a further encapsulation material. The technical effect was the gradual release of the aerosol generating agent. The technical problem was the provision of aerosol generating agents that were not released simultaneously, but gradually and in a controlled manner during smoking. It was clear from document (3) that a controlled approach was intended (column 2, lines 22 to 28). Furthermore, document (3) used the same aerosol generating agents as listed in claim 1 of auxiliary request 2 and clearly indicated that these aerosol generating agents could be used in admixture with flavourings (column 7, lines 23 to 35); see also document (7). The skilled person would thus have consulted document (1) and followed its teaching to further control the release by using different encapsulation materials. They would have encountered no technical difficulties when applying the teaching of document (1).

IX. The parties' final requests were as follows.

Appellant 1 (patent proprietor) requested that the decision under appeal be set aside and that the opposition be rejected and the patent be maintained as granted. Alternatively, it requested that the patent be maintained on the basis of any of auxiliary requests 1 to 19, auxiliary requests 1 to 15 having been submitted with the statement setting out the grounds of appeal, auxiliary requests 16 to 19 with the letter dated

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23 August 2017. Further, appellant 1 requested that documents D1a, D1b, D1c not be admitted.

Appellant 2 (opponent) requested that the decision under appeal be set aside and that the European patent No. 2488054 be revoked.

Reasons for the Decision

- 1. The appeals are admissible.
- 2. Unless indicated otherwise, reference to the RPBA in this decision is to the new RPBA, which entered into force on 1 January 2020 (Article 25(1) RPBA).
- 3. Main request
- 3.1 Amendments
- 3.1.1 The subject-matter of claim 1 as granted is disclosed in claims 1 and 2 and certain passages of the description as filed. Claims 1 and 2 as filed define that the release of an aerosol generating agent from an encapsulated state in a heat not burn product is controlled to produce a desired puff yield of total particulate matter. The release of aerosol generating agents to produce a desired puff yield of total particulate matter is thus the generally defined result to be achieved by encapsulating the aerosol generating agents. Details on how the encapsulation can be put into practice can be found throughout the description. One such passage can be found on page 7, lines 1 to 3. Other passages can be found on page 7, line 17 to page

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- 9, line 2 and in claims 3 and 4.
- 3.1.2 Appellant 2 argued that the omission of the timing aspect in claim 1 of the main request meant that these technical features had been taken out of context and newly linked to the puff yield of total particulate matter. The skilled person would consider different encapsulation materials and different encapsulation approaches to be always linked to timing aspects. Furthermore, according to page 4, lines 11 to 15, encapsulation would always control the timing of the release of the aerosol generating agent, a feature which was absent in claim 1 of the main request.

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The board cannot follow this argument. The puff yield of total particulate matter is generally defined in the claims and in the description as filed (claims 1 and 2, page 3, lines 27 to 29). It can thus be combined with any of the more specific embodiments in the application as filed. Furthermore, different encapsulation materials and different encapsulation approaches are disclosed throughout the description and the claims as filed without any reference to timing aspects – see the other passages cited in the last sentence of point 3.1.1.

- 3.1.3 The subject-matter of the main request fulfils the requirements of Article 123(2) EPC.
- 3.2 Novelty
- 3.2.1 The subject-matter of claim 1 of the main request is defined, in large part, by functionally defined features (e.g. "aerosol generating agent" and "encapsulation material") and by a result to be achieved ("to produce a desired puff yield of total

particulate matter"). Furthermore, the term "desired" has no generally accepted meaning and is thus not limiting.

3.2.2 Document (1) discloses an electrically heated cigarette comprising a sorbent and a flavouring, which is released in the cigarette in a controlled manner during smoking (paragraph [0007]), i.e. released within a certain time frame. The flavouring is included in a flavouring-release additive (claim 1). A list of flavourings can be found in paragraph [0054]. It has not been challenged that these flavourings will be present as part of an aerosol upon use of the electrical cigarette.

The flavouring-release additives may have different structures and compositions in the electrically heated cigarette. In one preferred embodiment, the flavouring-release additive is in the form of beads (paragraph [0055]). These beads are present in the electrically heated cigarette in an amount of up to about 20% and comprise up to about 20% of flavouring (paragraph [0060]). Different bead compositions having two or more different minimum flavouring-release temperatures can be incorporated into the electrically heated cigarette (paragraph [0062]). According to paragraph [0057], the release at certain temperatures is linked to the composition of the beads, with reference being made to the binders, which are part of the encapsulating materials (see paragraph [0056]).

Document (1) thus provides a direct and unambiguous disclosure of an electrically heated cigarette, i.e. a heat not burn product, comprising agents encapsulated by different encapsulation materials which control the release of these agents.

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It remains to be determined whether the agents, i.e. the flavourings of paragraph [0054], contribute to an aerosol formed during the use of the electrically heated cigarette in such a way as to control the production of a desired puff yield of total particulate matter.

It seems to be common ground that flavourings on their own are not suitable to provide the necessary amount of total particulate matter present in the aerosol of a heat not burn product providing a similar smoking experience to a conventional cigarette. However, as pointed out by appellant 2, the subject-matter of claim 1 of the main request does not require any such amount of aerosol. The term "desired puff yield of total particulate matter" simply requires the presence of a certain, possibly minimal, amount of total particulate matter in a puff. The flavourings present in the beads in document (1) will provide this minimal puff yield of total particulate matter upon the use of the electrical cigarette. As a consequence, the disclosure of document (1) is novelty-destroying for the subject-matter of claim 1 of the main request (Article 54 EPC).

3.2.3 Further arguments

Appellant 1 argued that the skilled person would not have considered the flavourings in document (1) to represent "aerosol generating agents" in the context of heat not burn products.

In view of the disclosure of paragraph [0018] of the patent in suit, the board cannot follow this argument. Paragraph [0018] clearly defines that an aerosol

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generating agent is a substance which generates an aerosol upon heating. This condition is fulfilled by the flavourings in document (1).

4. Admission of auxiliary requests 1 and 2

Pursuant to Article 25(3) RPBA, Article 12(4) to (6) RPBA does not apply to appeals where the statement of grounds of appeal was filed before 1 January 2020 and any reply thereto was filed in due time. Instead, Article 12(4) RPBA 2007 continues to apply. This is the case for the present appeal.

From the minutes of the oral proceedings before the opposition division, it can be established that the set of claims allowed by the opposition division (auxiliary request 1 "filed as auxiliary request 9 during the proceedings"; see point 43 of the minutes) was filed in response to the opposition division's finding that document (15) was novelty-destroying for the subject-matter of the main request. The minutes do not give any indication that the former auxiliary requests 1 to 8 (filed on 20 February 2015) were discussed. It appears that auxiliary request were not considered helpful to overcome the finding of lack of novelty vis-à-vis document (15). Thus, the withdrawal of these requests cannot be equated with avoiding a decision on their subject-matter.

With the statement setting out the grounds of appeal, appellant 1 provided in-depth arguments why certain documents - including document (15) - were not novelty-destroying for the main request. Furthermore, it submitted auxiliary requests providing fall-back positions in the event that the board did not completely follow its line of argument. The re-

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submission of (former) auxiliary requests 1 and 2 with the statement of grounds of appeal can thus be seen as a legitimate attempt by the patent proprietor to defend its case. The fact that the subject-matter of these requests corresponds to the subject-matter of claim requests which did not have to be discussed in the opposition proceedings should not deprive appellant 1 of the possibility to react to a different finding of lack of novelty vis-à-vis document (1).

For these reasons, the board decided not to hold auxiliary requests 1 and 2 inadmissible, exercising its discretion under Article 12(4) RPBA 2007.

5. Auxiliary request 1

Claim 1 of auxiliary request 1 differs from claim 1 of the main request in that it is the timing of the release that is controlled by the different encapsulation materials or different encapsulation approaches, not just the release as such.

As already stated in point 3.2.2 above, the intention in document (1) is to release the flavouring in the cigarette in a controlled manner during smoking (paragraph [0007]), and this constitutes a release within a certain time frame. The control is achieved by the above-discussed flavouring-release additives, which comprise different encapsulation materials.

Therefore, the same arguments put forward as regards the novelty of the subject-matter of claim 1 of the main request also apply to the subject-matter of claim 1 of auxiliary request 1, which, consequently, lacks novelty (Article 54 EPC).

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6. Auxiliary request 2

6.1 Amendments

Appellant 2 did not submit any additional arguments on added matter for the set of claims of auxiliary request 2.

The conclusions reached for the main request apply. Concerning the additional feature of the list of aerosol generating agents, reference is made to claim 6 as filed.

The subject-matter of the set of claims of auxiliary request 2 fulfils the requirements of Article 123(2) EPC.

Appellant 2 did not raise any objections concerning Article 123(3) EPC. As the inclusion of a list of specific aerosol generating agents represents a clear limitation of the subject-matter compared with the claims as granted, the board has no such objections either.

6.2 Admission of documents (1a), (1b) and (1c)

Documents (1a), (1b) and (1c) formed part of the decision under appeal (see point 17 of this decision).

The admission of these documents was not contested during the opposition proceedings, as can be seen from the decision under appeal and the minutes of the oral proceedings before the opposition division.

The board thus has no discretion under Article 12(4) RPBA 2007 on the admission of these documents.

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Consequently, documents (1a), (1b) and (1c) form part of the appeal proceedings pursuant to Article 12(2) RPBA.

6.3 Novelty

6.3.1 Document (1) when taking into account documents (1a), (1b) or (1c), which are incorporated into document (1) by reference

Document (1) discloses several ways of encapsulating flavourings. Paragraphs [0055] to [0062] describe encapsulation in beads. In paragraph [0059] reference is made to document (1c) by stating that "Processes for preparing beads containing an active ingredient, such as a flavor, are disclosed in U.S. Patent No. 6,325,859". Paragraphs [0063] to [0070] of document (1) disclose encapsulation in films. In paragraph [0067] it is stated that "Exemplary processes that can be used to prepare the films are described in U.S. Patents Nos. 3,006,347 and commonly-owned 4,715,390, each of which is incorporated herein by reference in its entirety". These two cited documents are document (1a) and (1b), respectively. Document (1) refers explicitly to documents (1a), (1b) or (1c) only for information on processes for preparing beads or films and does not provide any direct reference to materials or agents. Since there is no direct reference to a specific example or to materials or agents to be used, the materials or agents mentioned in documents (1a), (1b) and (1c) do not form part of the disclosure of document (1). There is thus no disclosure in document (1) of encapsulated aerosol generating agents as listed in claim 1 of auxiliary request 2.

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Document (1) does not disclose the subject-matter of claim 1 of auxiliary request 2 and is thus not novelty-destroying (Article 54 EPC).

6.3.2 Document (15)

Document (15) defines an aerosol generating material for a smoking article, comprising particles that consist essentially of diluent encapsulated by barrier material. The diluent is an aerosol generator (claims 1 and 2).

The aerosol generating material (all the substances listed on page 3, paragraph 1 fall under claim 1 of auxiliary request 2) is to be incorporated into a smoking article which may be a heat not burn product (page 8, lines 12 to 20). Heat not burn products thus have to be selected from a list; they are not the preferred smoking articles in document (15).

Page 6, lines 21 to 25 describes that the aerosol generating material may optionally consist of several different types of diluent particles. It goes on to state that, alternatively, the encapsulated diluent particles may be combined with other substances and formulated into a new material in which the particles remain intact. The use of the terms "optional" or "alternative" necessitates further selections.

Document (15) does not directly and unambiguously disclose the simultaneous presence in the heat not burn product of encapsulated aerosol generating agents that have different encapsulation materials or were obtained by different encapsulation approaches.

The figures of document (15) are schematic. In the absence of any disclosure in the corresponding parts of

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the description, they cannot be interpreted as directly and unambiguously depicting the concomitant presence of particles obtained by different encapsulation approaches. As pointed out by appellant 1, spherical particles may be inhomogeneous in terms of the distribution of material. Consequently, views of different sections would provide figures as depicted in document (15).

Document (15) does not disclose the subject-matter of claim 1 of auxiliary request 2 and is thus not novelty-destroying (Article 54 EPC).

Further arguments

Appellant 2 argued that the construction of the term "different" was of crucial importance. The board cannot follow this argument for the reasons given under point 6.4 of this decision.

6.4 Sufficiency of disclosure

Appellant 2 argued that the unspecific language used in the claims, especially the term "different" used in the independent claims, meant that the skilled person would be unable to determine whether or not they were working within the scope of the claims. In the absence of any further basis or more specific details in the application as filed, there was thus insufficiently clear and complete guidance to enable the skilled person to "work the patent".

The objection concerning the scope of the claim amounts basically to a clarity objection, which is not open for discussion (see decision of the Enlarged Board of Appeal G 03/14, OJ 2015, AlO2).

It is, however, necessary to determine whether the application as filed provides the skilled person with any guidance on how to arrive at a heat not burn product having different encapsulation materials or different encapsulation approaches. Guidance to this effect can be found in several passages, e.g. in claims 3 and 4 as filed, which define physical properties (melting points of the "barrier materials") of the different encapsulation materials and different thicknesses of the encapsulation material ("barrier material"), respectively. Furthermore, the encapsulation materials listed (see for example claim 7 as filed) allow the skilled person to choose encapsulation materials with different melting points and other differing properties. Therefore, the skilled person receives guidance that the term "different" relates to intentional attempts to create differences in the encapsulation. Inhomogeneities are thus to be disregarded.

The subject-matter of the claims of auxiliary request 2 is sufficiently disclosed.

6.5 Inventive step

6.5.1 The patent in suit relates to heat not burn products comprising aerosol generating agents. In order to gain consumer acceptance as an alternative to conventional smoking articles, the heat not burn product should produce a similar experience to conventional smoking articles. One important aspect is the "puff profile", in which the total particulate matter delivery in each puff is important. The patent therefore aims to improve the performance of heat not burn products by controlling the release of aerosol generating agents

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(paragraphs [0001], [0007], [0008] and [0013]). In order to control the release to produce a desired puff yield of total particulate matter, claim 1 of auxiliary request 2 requires the aerosol generating agents to be encapsulated using different encapsulation materials or different encapsulation approaches.

6.5.2 Appellant 2 presented two documents, documents (1) and (3), as the closest prior art. Appellant 1 contested the suitability of document (1) as the closest prior art.

Document (1) relates to electrically heated cigarettes comprising a sorbent (e.g. activated carbon or zeolite) and a flavouring. These are incorporated in the cigarette in a form that minimises the release and migration of the flavouring in the cigarette prior to smoking. The flavouring is released in the cigarette in a controlled manner during smoking. Thus, the flavouring enhances subjective characteristics of the cigarette (claims 1 to 3 and paragraph [0007]). In the background section of document (1), it is stressed that electrical smoking systems should be "capable of delivering smoke in a manner similar to the smoker's experiences with traditional cigarettes, such as by providing an immediacy response (smoke delivery occurring immediately upon draw), a desired level of delivery (that correlates with FTC tar level), a desired resistance to draw (RTD), as well as puff-topuff and cigarette-to-cigarette consistency" (paragraph [0003]). There is, however, no link between this very general passage about electrically heated cigarettes and the aim of document (1), which concerns flavourings and their behaviour in the electrically heated cigarettes. There is also no disclosure linking the flavourings to the (generation of) aerosols in the

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electrically heated cigarette. Since document (1) does not mention puff yield or total particulate matter per puff apart from the very general reference in the background section set out above, the skilled person would not consult document (1) for guidance when trying to provide and control a certain puff yield of particulate matter.

Document (3) relates to smoking articles incorporating a heat conductive capsule which undergoes a change in structure during use to release aerosol forming material contained within it, the aerosol preferably resembling tobacco smoke (column 1, lines 7 to 11). The capsule is made from a material and configured and located such that the capsule ruptures or otherwise changes its structure within seconds of the heat source being ignited. A sorbent or blotting material is optionally provided near or within the capsule to absorb, adsorb or otherwise temporarily retain the aerosol forming material, and helps to provide uniform aerosol delivery over the life of the product (column 1, line 66 to column 2, line 21; claims 1 and 8). There is thus the clear intention for an aerosol to be generated in a controlled manner throughout the use of the smoking article, which is very close to the problem addressed in the patent in suit. Consequently, document (3) can be considered to represent the closest prior art.

6.5.3 Further to the disclosure discussed under point 6.5.2, document (3) describes that more than one heat conductive capsule may be employed. In column 7, lines 14 to 18, it is disclosed that there may be several separate capsules or capsules linked to each other. Whereas the capsules may contain different materials, the disclosure for such different materials merely

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relates to the filling (aerosol former or aerosol former and flavouring) and not to different encapsulation materials (see column 7, lines 18 to 22).

The difference between claim 1 of auxiliary request 2 and the disclosure of document (3) is thus the use of different encapsulation materials or different encapsulation approaches.

No surprising effect has been linked to this difference.

6.5.4 The technical problem can thus be considered the provision of an alternative heat not burn product comprising an encapsulated aerosol generating agent for controlling the puff yield of total particulate matter.

The problem has been solved.

6.5.5 It remains to be determined whether the claimed solution is obvious.

Document (3) itself does not lead the skilled person towards the claimed subject-matter. The encapsulation materials are clearly described as "aluminum foil or tubing, ceramic or other such materials which will quickly absorb heat and rupture or otherwise changes structure" (column 6, lines 28 to 33). There is no guidance to employ different encapsulation materials. Different encapsulation approaches are not suggested either. The passage in column 7, lines 14 to 17 does not relate to different encapsulation approaches. The presence of a large number of capsules placed in different areas or locations of the smoking article cannot be considered to be attributable to a "different encapsulation approach" since the already-encapsulated

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capsules are put in place without influencing the act of encapsulation itself. Consequently, document (3) does not contain any guidance towards the use of different encapsulation materials or towards different encapsulation approaches.

When looking for an alternative heat not burn product for controlling the puff yield of total particulate matter, the skilled person would not have consulted document (1). As stated before, document (1) does not link the fact that its flavourings are encapsulated to the control of the puff yield of total particulate matter. Furthermore, the encapsulation materials in document (3) (see column 6, lines 28 to 33) are entirely different from those listed in document (1), which at first glance cannot be described as leading to "heat conductive" capsules (see paragraph [0056]). Consequently, when starting from document (3) and a mechanism of release based on heat conductive capsules, the skilled person would not have contemplated using the encapsulation materials disclosed in document (1). Document (1) can thus not lead the skilled person to the claimed subject-matter.

The fact that aerosol generating agents can be encapsulated in admixture with flavoring agents is irrelevant in the absence of any guidance towards the use of different encapsulation materials when starting from document (3) as the closest prior art.

6.5.6 The subject-matter of the set of claims of auxiliary request 2 involves an inventive step (Article 56 EPC).

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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 with the following claims and a description, including drawings, to be adapted thereto:

 Claims 1 to 10 of auxiliary request 2 filed with the statement setting out the grounds of appeal.

The Registrar:

The Chairman:



M. Schalow

A. Lindner

Decision electronically authenticated