Datasheet for the decision of 7 October 2019

Case Number: T 1538/16 - 3.2.04
Application Number: 09703354.2
Publication Number: 2247206
Language of the proceedings: EN

Title of invention: TOBACCO SMOKE FILTER

Patent Proprietor:
Filtrona Filter Products Development Co. Pte. Ltd

Opponents:
Hauni Maschinenbau AG
JT International S.A.

Headword:

Relevant legal provisions:
EPC Art. 56
Keyword:
Remittal to the opposition division - (no)
Inventive step - (no)
Apportionment of costs - (no)

Decisions cited:

Catchword:
DECISION of Technical Board of Appeal 3.2.04
of 7 October 2019

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Decision under appeal: Decision of the Opposition Division of the European Patent Office posted on 28 April 2016 revoking European patent No. 2247206 pursuant to Article 101(3)(b) EPC.
**Composition of the Board:**

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<td>Chairman</td>
<td>A. de Vries</td>
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<td>Members</td>
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Summary of Facts and Submissions

I. The appeal was filed by the appellant (patent proprietor) against the decision of the opposition division to revoke the patent in suit (hereinafter "the patent").

II. Two oppositions were filed against the patent as a whole and based on, amongst other grounds, lack of novelty and lack of inventive step, Article 100(a) together with Articles 54(2) and 56 EPC. The opposition division decided, amongst other things, that the subject matter of claim 1 of admitted requests lacked novelty. They also decided that each party should bear its own costs.

III. Oral proceedings were duly held before the Board on 7 October 2019 in the absence of the appellant-proprietor, who, having been duly summoned, informed the Board in a letter of 7 August 2019 that they would not attend.

IV. The appellant-proprietor requests that the patent be maintained on the basis of the Main Request, or one of the First, Third or Fourth Auxiliary Requests, all filed with the Grounds of Appeal, or the Second or Fifth Auxiliary Request dated 16 November 2018. Alternatively, if one of these requests were to be found novel, the appellant has requested remittal of the case to the opposition division. Further, the appellant has requested that the decision under appeal also be set aside in regard of the decision on costs, and that costs of the opposition proceedings be awarded against opponent 1 due to the late filing of documents D51 - D62.
The opponents-respondents request that the appeal be dismissed.

V. Claim 1 of the various requests reads as follows:

Main request:

"A tobacco smoke filter or filter element comprising a cylindrical plug of a substantially homogeneous filtering material of circumference between 14.0 and 23.2 mm, wherein the substantially homogeneous filtering material comprises a plurality of randomly oriented staple fibres wherein the staple fibres are cellulose acetate fibres".

Claim 1 of the first auxiliary request reads as for the main request but adds at the end of the claim the following wording:

"," and wherein the staple fibres are formed from a tow of total denier of between 14,000g and 40,000g per 9,000m length".

Claim 1 of the second auxiliary request reads as for the main request but deletes the wording "or filter element" in the first line and adds the following wording to the end of the claim:

"," wherein the tobacco smoke filter does not include an adsorbent including smoke entrainable particles".

Claim 1 of the third auxiliary request reads as for the main request but for the range of circumference values which is more narrowly defined as between 16.0 and 20.0mm.
Claim 1 of the fourth auxiliary request reads as for the main request but adds at the end of the claim the following wording: "and the staple fibres are crimped."

Claim 1 of the fifth auxiliary request reads as for the main request but adds at the end of the claim the following wording: "wherein the staple fibres are formed from a tow of total denier of between 23,000g to 40,000g per 9,000m length."

VI. In this decision, reference is made to the following document:

D1: US3552400

VII. The appellant-proprietor argued, amongst other things, that the subject matter of claim 1 of all requests differs from D1 in the claimed filter circumference being smaller, namely it corresponds to a slim cigarette. As the opposition division only considered novelty for the requests, if novelty is confirmed for one of the requests the case should be remitted for consideration of the remaining ground of lack of inventive step. Nonetheless, claim 1 of all requests involves an inventive step starting from D1 as closest prior art. In particular, the skilled person would be technically prejudiced not to use D1's filter for a slim cigarette since they would believe the phenol removing capability of such a filter was unacceptable.

VIII. The respondent opponents argued, amongst other things, that the case should not be remitted. Moreover, if indeed the subject matter of claim 1 of all requests does differ from D1 in the filter circumference, it would nevertheless be trivially obvious for the skilled
person to adapt D1's filter by reducing its circumference to fit slim cigarettes. Consequently, claim 1 of all requests lacks an inventive step.

Reasons for the Decision

1. The appeal is admissible.

2. Background

The patent relates to cigarette filters (see published patent specification, paragraph [0001] and all versions of claim 1). The patent (see published patent specification, paragraph [0028]) acknowledges that the filter of the invention, which is made of randomly oriented staple fibres, can be manufactured by the method described in D1. The invention concerns using such a filter (or corresponding filter element) for a slim cigarette (see published patent specification, paragraphs [0003] and [0007]).

3. Main request, claim 1, novelty with respect to D1

3.1 D1 discloses (see title and abstract and figure 2) a tobacco smoke filter in the form of a cylindrical plug.

The filter material is substantially homogeneous (see column 3, lines 35 to 43), because its characteristics are uniform throughout the cross section of the material.

Furthermore (see column 2, lines 62 to 65), the filter material is made from staple fibres. These are randomly oriented (see D1, figure 2, cf. description of D1 in the published patent specification of the disputed
patent, page 4, lines 33 and 40 to 44). D1 also
discloses that the material of the fibres is cellulose
acetate (see column 2, lines 1 to 12).

3.2 Therefore, the only possible distinguishing claim
feature with respect to D1 is that the cylindrical
filter plug has a circumference of between 14.0 and
23.2mm. This, the appellant-proprietor has argued, is
not directly and unambiguously known from D1.

In this respect, the Board notes that the only explicit
disclosure of cigarette filter circumference is in
column 7, lines 14 to 35, including table 1. There,
however, filter rods have a diameter of 7.9mm,
corresponding to a circumference of 24.8mm, thus lying
outside the claimed circumference range.

3.3 If it is accepted, for the sake of argument, that D1
does not take away novelty of claim 1, this raises the
issue of inventive step starting from D1.

4. Main request, claim 1, inventive step starting from D1
in combination with the skilled person's general
knowledge

4.1 Request of the appellant-proprietor for remittal to the
opposition division for consideration of inventive step

4.1.1 In accordance with Article 111(1) EPC, second sentence,
the Board of Appeal may either exercise any power
within the competence of the department which was
responsible for the decision appealed or remit the case
to that department for further prosecution.

4.1.2 The Board commented provisionally in a communication
pursuant to Rule 100(2) EPC dated 19 June 2019 (see
point 10) by outlining the following approach: "Insofar as obviousness can be concluded on the basis of one of the documents cited against novelty (for example D1) alone as a question of common general knowledge, the Board is inclined to decide inventive step itself, as requested by respondent-opponent I".

4.1.3 Neither in subsequent written proceedings nor at the oral proceedings did the parties raise objections to applying this approach. In the interests of overall procedural economy, the Board therefore decided to exercise its discretion under Article 111(1) EPC by dealing with the issue of inventive step starting from D1 in combination with the skilled person's general knowledge itself.

4.2 As already explained, the only distinguishing feature of claim 1 with respect to D1 can be that the filter plug has a circumference of between 14.0 and 23.2mm, which overlaps with the circumferences of known slim (21 to 23.2mm) or super-slim (16 to 18mm) cigarettes. On the other hand, D1 (see again column 7, lines 14 to 35) only explicitly discloses tobacco smoke filters having a circumference of 24.8mm, which corresponds to a conventional cigarette (cf. published patent specification, paragraph [0003]).

4.3 The technical effect of this distinguishing feature (small circumference) is to make the filter suitable for use in, amongst other cigarettes, a slim or super-slim cigarette.

4.4 In the Board's view, the associated objective technical problem is how to adapt the filter of D1 for use in slim or super slim sized cigarettes.
In this respect, the problem developed corresponds to the first part of the one proposed by the appellant-proprietor in their appeal grounds (see section "D1 as closest prior art", bridging pages 7 and 8). As summarised by the Board, the problem proposed there was to provide a slim cigarette with improved [filtering] of phenols.

In this respect, the Board does not agree with the second part of that proposal (improved phenol filtering). This is because the material of both the claimed filter and D1 is the same and only their diameters differ. Indeed, the patent itself confirms (see published specification, paragraph [0028]) that the filter of the invention may be made by the method proposed in D1. Thus, however good the filter of the invention may be at filtering harmful phenols, the filter of D1 will be equally good.

Turning again to the teaching of D1, even accepting that D1 does not disclose filters for slim or super slim cigarettes in particular, the skilled person will understand that its teaching is broadly applicable to filters of different sizes (see for example column 10, lines 21 to 46): the smoke filters may be for cigarettes or industrial smoke filters. By the same token (see column 3, lines 24 to 34), whilst the reference to the length of staple fibres can vary and the predominant portion slightly longer than the finished product may not directly and unambiguously disclose particular filter sizes, the Board holds that the skilled person will understand that this reference at least teaches that filters of different sizes may be produced by the method described by adjusting the staple fibre length.
4.7 It is with this in mind that the skilled person considers the objective technical problem (adapting D1's filter for slim or super slim cigarettes). In this regard, the Board notes that it is not disputed that the skilled person knows of slim and super-slim cigarettes from their general knowledge. Since, furthermore, the filter of a cigarette has approximately the same diameter as the cigarette itself, in solving the problem, it would be obvious for the skilled person to apply D1's broad teaching of a method of making filters of different sizes (see above), and use this to make a filter having the circumferences of generally known slim and super-slim cigarettes, for example 16mm.

4.8 The Board concludes that, in so doing, the skilled person would arrive at the subject matter of claim 1 as a matter of obviousness.

4.9 In reaching this conclusion, the Board is not convinced by the appellant-proprietor's argument that the skilled person would not, as a matter of obviousness, reduce the circumference of D1's filter due to the technical prejudice of knowing its phenol removing performance to be inadequate for a slim cigarette (cf. grounds of appeal, page 8, first full paragraph).

Since D1's filter is used for regular cigarettes, the skilled person knows that the material's phenol removing performance is adequate for filtering tobacco smoke, as such. Therefore, there can be no such technical prejudice regarding D1's filter when used in cigarettes in general. By the same token, the skilled person will know no such prejudice in the case of slim cigarettes. In particular, the filter material does not change because the filter is slim. The filter is
merely, like the rest of the cigarette, thinner than a regular cigarette. Indeed, as already explained, the phenol removing performance plays no role in formulating the objective technical problem. In other words the skilled person is solely concerned with finding a suitable circumference for the filter, and this they know from their general knowledge.

5. Auxiliary requests, claim 1, inventive step starting from D1 with the skilled person's general knowledge

5.1 In the Board's view, leaving aside the question of their admissibility, the subject matter of claim 1 of the auxiliary requests lacks inventive step for the same reasons as apply to the main request.

5.2 The first and fifth auxiliary requests add to the main request the feature of specific ranges of total denier of the tow from which the staple fibres of the claimed filter are formed.

In the Board's view, this feature imposes no technical limitation on the filter. This is because staple fibres are discrete fibres of specific length (cf. published patent specification, paragraph [0009]), so, once a particular tow is cut into staple fibres, the denier (weight per 900m length) of the original tow plays no role. By way of example, a filter containing staple fibres formed from a short length of tow with a high denier would be indistinguishable from one formed from a longer length of lower denier tow. Therefore, the subject matter of claim 1 of these requests is the same as that of the main request and thus lacks inventive step for the same reasons as apply to the main request.
5.3 Claim 1 of the second auxiliary request is limited to a filter (the "filter element" option of the main request is deleted). Furthermore, the claimed filter is defined as having no adsorbent.

In the Board's view, D1 discloses both these features. In particular, D1 (see for example the abstract and column 1, lines 4 to 6) discloses filter plugs, used as smoke filters. These filters may be fitted to cigarettes for testing (see column 9, lines 35 to 49).

D1 also discloses cellulose acetate filters without additives (see column 5, lines 63 to 68) in that blending additives with tow material is disclosed as a possible "additional", thus optional, measure. Therefore, D1 discloses filters without adsorbent.

Thus, the subject matter of claim 1 lacks inventive step for the same reasons as apply to the main request.

5.4 With respect to the third auxiliary request, as already explained in connection with the main request (see section 4.7), it would be obvious to modify D1's filter by making its circumference 16mm. Therefore, as for the main request, claim 1 of this request lacks inventive step.

5.5 With regard to the fourth auxiliary request, D1 discloses to use crimped tow (see column 2, lines 25 to 30 and lines 33 to 35). Thus the staple fibres of the resulting filter must likewise be crimped. Therefore, claim 1 of this request lacks inventive step for the same reasons as apply to the main request.

6. Request of the appellant-proprietor for a different apportionment of costs in opposition
6.1 In its communication in preparation for the oral proceedings (see section 11), the Board gave a preliminary opinion on the appellant-proprietor's request for a different apportionment of costs in opposition proceedings. The Board's provisional conclusion was that the opposition division correctly decided that each party should bear their own costs.

6.2 The reasons the Board gave were as follows:

"11.1 Under Article 104(1) EPC and Article 16(1) RPBA, each party must, as a rule, meet the costs it has incurred, unless reasons of equity justify to order otherwise. For case law relevant to the issue of apportionment of costs, see CLBA IV.C.6. and IV.C.

6.2.1.

11.2 In the present case, it is true that the respondent-opponent I filed 12 documents on 18 February 2016, one month prior to oral proceedings before the opposition division.

Of these, D51 to D55 and D58 appear to have been filed to provide background information, rather than introduce new attacks against the patent. D59 to D62 appear to be related to D1. They appear not to raise new issues nor are technically significantly different from D1. Consideration of all these documents would therefore not appear to have posed such a significant additional burden on the proprietor, as might have justified a different apportionment of costs for reasons of equity. Therefore, the Board is provisionally of the opinion that the opposition division (see impugned decision, section 16) correctly decided that each party should bear their own costs".
6.3 None of the parties have commented on the reasoning or conclusions given by the Board in this matter. Nor does the Board see any reason to change its opinion. Therefore, the Board confirms the decision of the opposition division (see reasons, section 16) that each party shall bear their own costs.

7. Since none of the requests on file are allowable, the Board can but confirm the decision of the opposition Division to revoke the patent.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: 

The Chairman:

G. Magouliotis

A. de Vries

Decision electronically authenticated