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Datasheet for the decision of 19 May 2025

Case Number: T 1121/22 - 3.2.04

Application Number: 14733721.6

Publication Number: 3007570

IPC: A24D3/02

Language of the proceedings: EN

Title of invention:
METHOD AND SHOE FOR PRESSING SEGMENTS OF MULTI-SEGMENT FILTER

Patent Proprietor:
International Tobacco Machinery Poland Sp. z o.o.

Opponent:
G.D Società per Azioni

Headword:

Relevant legal provisions:
EPC Art. 123(2), 54, 56

Keyword:
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Inventive step

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Catchword:

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Case Number: T 1121/22 - 3.2.04

D E C I S I O N
of Technical Board of Appeal 3.2.04
of 19 May 2025

Appellant: (Opponent)	G.D Società per Azioni Via Battindarno, 91 40133 Bologna (IT)
Representative:	Cossu, Alessandro Bugnion S.p.A. Via di Corticella, 87 40128 Bologna (IT)
Respondent: (Patent Proprietor)	International Tobacco Machinery Poland Sp. z o.o. ul. Andrzeja Stanikowskiego 2 26-600 Radom (PL)
Representative:	Hoffmann Eitle Patent- und Rechtsanwälte PartmbB Arabellastraße 30 81925 München (DE)
Decision under appeal:	**Decision of the Opposition Division of the European Patent Office posted on 4 April 2022 rejecting the opposition filed against European patent No. 3007570 pursuant to Article 101(2) EPC.**

Composition of the Board:

Chairman	C. Kujat
Members:	S. Oechsner de Coninck
	M. Millet

Summary of Facts and Submissions

I. The appellant (opponent) lodged an appeal against the decision of the opposition division rejecting the opposition filed against European patent No. 3 007 570 pursuant to Article 101(2) EPC.

II. The Opposition Division had held that the grounds for opposition mentioned in Article 100(a) and (c) EPC did not prejudice the maintenance of the granted patent, having regard to the following document in particular:

D1: US 6,059,706

III. In a communication in preparation for oral proceedings the Board gave its preliminary opinion on the relevant issues.

IV. Oral proceedings were held on 19 May 2025 in the presence of both parties.

V. The appellant (opponent) requested that the decision under appeal be set aside and that the European patent No. 3 007 570 be revoked.

VI. The respondent (patent proprietor) requested that the appeal be dismissed, alternatively that the patent be maintained as granted or on the basis of one of auxiliary requests 1 to 47 all filed during opposition proceedings or auxiliary requests 48 to 191 filed during appeal proceedings.

VII. The independent claims 1 and 2 according to the main request read as follows:

Claim 1

"A method of pressing filter segments (S) moving in a train of segments in a direction (T) of an axis (SA), comprising the step of:

supplying the train of filter segments along a longitudinal direction on a wrapper (103); wherein the method further comprises the steps of:

pressing the filter segments by means of the undersurface (111, 111A, 311, 411) of a shoe (10, 10A) situated above the train of filter segments,

which shoe (10, 10A) is provided with a set of nozzles (17A) for blowing in compressed air supplied through ducts (14, 15, 16), and

the nozzles (17A) widen in the direction (T) of movement of the segments (S) of the train of segments, and supplying a compressed air by means of the ducts (14, 15, 16), before gluing and covering the train of segments with the wrapper."

Claim 2

"A shoe (10, 10A) for pressing filter segments (S) moving in a train of segments moving in a direction (T) of an axis (SA)

wherein the undersurface (111, 111A, 311,411) of the shoe, for pressing filter segments (S) laid on a wrapper (103) before gluing and covering the train of

segments with the wrapper, is provided with a set of nozzles (17, 17A) for blowing in compressed air supplied through ducts (114, 15, 16), and

the nozzles (17A) widen in the direction (T) of movement of the segments (S) of the train of segments."

VIII. The relevant arguments of the parties are addressed in the following reasons for the decision.

Reasons for the Decision

1. Added subject-matter

1.1 The appellant challenges the conclusion drawn in the decision under appeal that the nozzles widen in the direction (T) of movement of the segments (S) of the train of segments added in claims 1 and 2 was directly and unambiguously derivable from the application as filed.

1.2 Basis for the widening direction

1.2.1 The direction for the enlargement or widening of the nozzle cross section is implicitly disclosed in the application as filed, as derivable from the sentence bridging pages 4 and 5. This sentence explains the difference in cross section of the nozzle 17 in Figure 4 with respect to the nozzle 17A in Figure 5, where the dimension D in the direction of the axis SA is greater than the dimension d in figure 4. This axis SA is explained in the previous paragraph of page 4 to be the axis SA of the train of segments S. Making it clear that the segments are aligned as a train forming the

continuous multi-segment rods once wrapped downstream of the shoe.

1.2.2 The Board thus agrees with the opposition division's conclusion as with the respondent, that in the whole context of the application as filed, the train of segments, the continuous multi-segment rods and the direction of movement of that train of segments and continuous multi-segment rods are aligned along the common direction SA, providing direct and unambiguous basis for the nozzles widening in this direction of movement, even if not expressed in these terms. Such understanding of the skilled person that all these directions are aligned is also supported and made clear in the figures, especially figure 2 where the direction T is shown to be parallel and thus identical to the axis SA of the train of segments.

1.2.3 The appellant's submission that Figure 5 only depicts a single section where the dimension D is greater, and thus does not disclose how the dimension of the nozzle may vary in different sections does not result in a lack of disclosure of a widening direction. Indeed the widening direction is not based solely on the disclosure of Figure 5. Rather what is shown in this figure is supplemented by other indications in the whole context of the application as filed. Especially the first paragraph on page 5 expressly discloses that the surface 17B of the nozzle, which enlarges the nozzle 17A, can have a conical form. Thus, Figure 5 does not represent the sole disclosure of a particular widening of the nozzle in a particular direction and limited to the sole depicted section.

1.3 Intermediate generalisation - No inextricable link.

1.3.1 The Board furthermore disagrees that the widening of the nozzle would be inextricably related with other features in the context of the application as filed, especially the inclination of the duct as submitted by the appellant. First the widening of all the nozzles in the same direction towards the multi-segment rod was disclosed as a stand alone feature in claim 3 as filed. As concerns the disclosure in Figure 5, its depicted content should be interpreted in conjunction with the related passage in the last paragraph of page 5. There, apart from the relevant information on the wider dimension D of the nozzle 17A at its outlet, the deflection from the vertical direction applicable to both embodiments of the nozzles 17 with or without widening is expressed as a further independent option (page 4, line 31: "can be deflected") and is therefore not inextricably related to the widening of the nozzle. The appellant's further reference to the inclination shown in Figure 14 also fails to be explained in the original application as having any inextricable link with the widening of the nozzle, see the last paragraph of page 5. By contrast this is explained to relate to another shoe 10' and therefore in the Board's understanding represents a further independent embodiment.

1.3.2 Even assuming the skilled person might derive some further technical effect in providing such deflection or inclination in combination with a widening nozzle as submitted by the appellant, this fails to represent an inextricable relationship or purported synergetic effect that the skilled person would associate to the widening as such and directly derivable from this option expressed in the original disclosure. Indeed as for the widening itself disclosed in claim 3 of the application as filed, the inclination of the ducts at

the same angle (β) is also disclosed as an independent and stand-alone feature in claim 12 as well as in the second paragraph on page 3 and is further applicable to both ducts with or without widening nozzles (last paragraph of page 4 in relation to figures 3 and 4). The same applies to the other angles (α) and (γ) disclosed in different parts of the application and figures as further independent options. Thus the omission of any feature considered by the appellant to represent an unallowable intermediate generalisation such as the inclination of the ducts, the cylindrical or conical shape of the nozzle, or the arrangement of the set of nozzles in one or more rows shown in Figures 7A, 7B, 9 and 10 is considered allowable by the Board because these omitted features are understood by the skilled person to relate to further optional and independent aspects disclosed in the context of the application as filed.

1.3.3 Furthermore since the widening of all nozzles in the set of nozzles in the same direction should be consistently applied to have the same meaningful interpretation taking into account the whole content of the application as expressed in item 1.2 above, it cannot be interpreted as a widening of one nozzle with respect to another in the direction of movement as further submitted by the appellant.

1.4 The appellant also challenges on added subject-matter the addition made to the preamble of claim 2 defining "A shoe (10, 10A) for pressing filter segments (S) moving in a train of segments moving in a direction (T) of an axis (SA)". However as expressed in item 1.4.2 above the axis of the multi segment rod is aligned with the moving train of segments, moreover this simply

appears to reproduce the same expression "moving in a train of segments" already found in claim 1 as filed. The further general statement on page 3, last but one paragraph of the appellant's statement of grounds of appeal that the omission from claim 2 that the train of segments forms a continuous rod may violate Article 123(2) EPC is not supported by reasons why this would be so and therefore fails to convince the Board. As further submitted by the respondent the resultant continuous rod is formed downstream from the pressing shoe defined in claim 2, therefore it is implicit that the claimed shoe is suitable for pressing the rod before wrapping and gluing the segments.

1.5 The appellant also challenges that the position of the nozzles is not defined in granted claim 1. The Board however concurs with the respondent that the position of the nozzles on the undersurface of the shoes is directly derivable from the expression used in claims 1 and 2 that the set of nozzles are provided for "blowing in" compressed air supplied through the ducts. Indeed any location other than on the undersurface of the shoe would not meet the requirement that air is "blown in" in the space between the shoe and the segments.

1.6 Thus the opposition division's positive finding on added subject-matter was correct.

2. Novelty with respect to D1.

2.1 D1 discloses a filter rod making machine KDF, in which a substantially rod-shaped tow from a nozzle 17 passes through a "gathering horn" 18, col. 6,lines 7-12. The cross-sectional area defined by the channel 21 of the wrapping station decreases in the direction away from the nozzle, see the sentence bridging col. 6 and 7.

Means for introducing compressed air into the tow 9 are shown in Fig. 2A and explained to have elongate openings or ports 28 through the wall 27 of channel 21, which ports the appellant identifies as nozzles widening in the direction of movement according to granted claims 1 and 2.

2.2 Although the elongated cross section of an opening 28 at the inner surface of the channel wall 27 may be seen to be greater than the cross section of the channel in a direction perpendicular to its axial extension through the wall 27, the Board agrees with the opposition division's conclusion in item 14.2 of the impugned decision that the ports 28 have a constant diameter. No variation in cross section producing a widening is disclosed in the text of document D1 or visible in its figures. Thus, the ports 28 do not form nozzles that widen in any direction, neither towards the tow 9 nor transverse thereto.

2.3 The appellant submits that granted claims 1 and 2 simply require a widening of any kind, which widening is clearly visible in Figure 2B of document D1 because the opening is stretched along its axis.

2.4 The Board disagrees because the expression "the nozzles widen in the direction of movement of the segments..." in granted claims 1 and 2 is understood to be associated with the technical effect of expanding the flow, as correctly submitted by the respondent. Such widening is understood by the Board as "becoming wider", and thus, implying a progressive - or even incremental - variation in the cross section of the nozzle in the direction of its axial extension through wall 27. Such a variation cannot be derived from a simple comparison in Figure 2B of D1 between the

constant cross section of ports 28 along their axial extension through wall 27, and their stretched outlet cross section at the inner surface of wall 27.

2.5 It thus follows, that the opposition division correctly assessed novelty with respect to D1.

3. Inventive step

3.1 In its communication pursuant to article 15(1) RPBA, the Board gave the following provisional opinion regarding inventive step in point 4, as follows:

"*The appellant's argumentation on lack of inventive step is based on the fact that an outlet of a duct or nozzle with a surface greater than the cross section of the duct can be obtained either by spacing out the walls of the ducts or by arranging the ducts with an inclination angle with respect to outlet surface, page 9, first paragraph of their grounds. Providing the other alternative from the inclined configuration disclosed in D1 would be obvious for the skilled person.*
The Board is not convinced, not least because D1 also fails to disclose a shoe in the sense of claims 1 and 2 or segments of filters, but also because the widening of the nozzle is associated with a technical effect derivable from the patent. Paragraph 023 of the patent associates the compressed air exiting the widened nozzle in figure 3 with a force F in the vertical plane. Any formulation of the problem should according to case law take into account this effect. Such a technical problem to be solved cannot merely be regarded as the provision of an alternative configuration of the nozzle as submitted by the appellant.

The skilled person does not seem to have any incentive to widen the nozzle when they address the problem related to pressure applied by a shoe on filter segments.

It would thus appear that the opposition division's positive conclusion on inventive step is correct."

3.2 At the oral proceedings the appellant-opponent expressly referred to their written submissions. Absent any further comment, the Board, after reconsideration of all arguments submitted in writing, sees no reason to change its provisional view that the decision correctly assessed the question of inventive step.

4. In the light of the above confirmation of the decision's conclusions in relation to added subject-matter, novelty and inventive step, the Board confirms the Opposition Division's decision to reject the opposition under Article 101(2) EPC.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

G. Magouliotis C. Kujat

Decision electronically authenticated