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Datasheet for the decision of 23 October 2019

Case Number: T 0167/16 - 3.5.03

Application Number: 09177471.1

Publication Number: 2199883

IPC: G05B19/418, A24C5/34

Language of the proceedings: EN

Title of invention:
A method of setting up and managing the inspection device in a machine for manufacturing tobacco products

Patent Proprietor:
G.D S.p.A.

Opponent:
Hauni Maschinenbau GmbH

Headword:
Optical inspection of tobacco products/G.D

Relevant legal provisions:
EPC Art. 100(c)
RPBA Art. 13(1)

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It can be changed at any time and without notice.

Keyword:

Grounds for opposition - added subject-matter (yes)
Late-filed request - admitted (no)

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Case Number: T 0167/16 - 3.5.03

D E C I S I O N
of Technical Board of Appeal 3.5.03
of 23 October 2019

Appellant: (Opponent)	Hauni Maschinenbau GmbH Kurt-A.-Körber-Chaussee 8-32 21033 Hamburg (DE)
Representative:	Verweyen, Andreas Müller Verweyen Patentanwälte Friedensallee 290 22763 Hamburg (DE)
Respondent: (Patent Proprietor)	G.D S.p.A. Via Battindarno, 91 40133 Bologna (IT)
Representative:	Bianciardi, Ezio Bugnion S.p.A. Via di Corticella, 87 40128 Bologna (IT)
Decision under appeal:	**Decision of the Opposition Division of the European Patent Office posted on 27 November 2015 rejecting the opposition filed against European patent No. 2199883 pursuant to Article 101(2) EPC.**

Composition of the Board:

Chairman	F. van der Voort
Members:	K. Schenkel
	R. Romandini

Summary of Facts and Submissions

I. This case concerns an appeal filed by the opponent (appellant) against the decision of the opposition division to reject the opposition filed against European patent No. 2 199 883.

II. The opposition was based on the grounds for opposition pursuant to Article 100(a), (b) and (c) EPC.

III. The appellant requested in its statement of grounds of appeal that the decision under appeal be set aside and that the patent be revoked.

IV. In its reply, the respondent (patent proprietor) requested that the appeal be dismissed or, in the alternative, that the patent be maintained on the basis of any one of first to third auxiliary requests filed with the reply.

V. Both parties conditionally requested oral proceedings.

VI. In a communication following a summons to oral proceedings, the board gave its preliminary opinion with respect to the grounds for opposition pursuant to Article 100(a), (b) and (c) EPC.

VII. Neither the appellant nor the respondent made substantive comments on the board's preliminary opinion.

VIII. Oral proceedings took place on 23 October 2019. During the oral proceedings, the respondent filed *inter alia* a "New auxiliary request 1 14h", which eventually replaced all auxiliary requests on file.

The appellant requested that the decision under appeal be set aside and that the patent be revoked in its entirety.

The respondent requested that the appeal be dismissed or, in the alternative, that the patent be maintained on the basis of the claims of the "New auxiliary request 1 14h" filed during the oral proceedings.

At the end of the oral proceedings, the chairman announced the board's decision.

IX. Claim 1 as granted (main request) reads as follows:

"A method of setting up and managing the inspection device in a machine for manufacturing tobacco products, said method including the steps of:

- loading a self-learning unit (19) with data relative to predetermined parameters (P1) characteristic of the particular brand of tobacco product in production;
- loading the self-learning unit (19) with data consisting in a plurality of reference images of the tobacco products;
characterized in that said method also includes the steps of:

- processing the data loaded into the self-learning unit (19) in order to determine parameters (P2) relative to the physical properties of the tobacco products in production, said parameters being calculated on the basis of the predetermined parameters (P1) characteristic of the particular brand and the significant images of the tobacco products;

- saving and storing the parameters (P2) relative to the physical properties of the tobacco products in production, in a table (29);
- utilizing an analysis and comparison unit (21) to process images of the manufactured tobacco products, said analysis and comparison unit (21) comparing the parameters (P2) relative to the physical properties of the tobacco products in production stored in the table (29) with corresponding parameters that are calculated from the images of the products received during production by the selfsame analysis and comparison unit (21) from an optical unit (13)."

X. Claim 1 of the "New auxiliary request 1 14h" reads as follows:

"A method of setting up and managing the inspection device in a machine for manufacturing tobacco products, said method including the steps of:

- loading a self-learning unit (19) with data relative to predetermined parameters (P1) characteristic of the particular brand of tobacco product in production;

- loading the self-learning unit (19) with data consisting in a plurality of significant images of the tobacco products, wherein the images of the manufactured tobacco products are acquired by an optical unit (13) comprising at least one line scan camera (14, 15) and synchronized in operation with timing pulses emitted by an encoder, the method including a step, performed by an operator utilizing an operator interface (23), of selecting the significant images of the tobacco products, wherein the significant images relate to tobacco products presenting predetermined quality parameters (P3) established for

the tobacco products in production; characterized in that said method also includes the steps of:

- processing the data loaded into the self-learning unit (19) in order to determine parameters (P2) relative to the physical properties of the tobacco products in production, said parameters being calculated on the basis of the predetermined parameters (P1) characteristic of the particular brand and the significant images of the tobacco products;

- saving and storing the parameters (P2) relative to the physical properties of the tobacco products in production, in a table (29);

- utilizing an analysis and comparison unit (21) to process images of the manufactured tobacco products, said analysis and comparison unit (21) comparing the parameters (P2) relative to the physical properties of the tobacco products in production stored in the table (29) with corresponding parameters that are calculated from the images of the products received during production by the selfsame analysis and comparison unit (21) from an optical unit (13), wherein said analysis and comparison unit (21) in operation executes analysis algorithms on said images coming from the optical unit (13)."

Reasons for the Decision

1. Claim 1 as granted - Article 100(c) EPC

1.1 Claim 1 relates to a method of setting up an inspection device in a machine for manufacturing tobacco products, in which data relative to parameters (P1)

characteristic of the particular brand of the respective tobacco products and reference images of the tabacco products are loaded into a self-learning unit (19). In a further step, parameters relative to the physical properties of the tobacco products in production (hereinafter parameters P2) are generated.

The generation of parameters P2 is specified in claim 1 in two paragraphs:

The first paragraph, in which "the data loaded into the self-learning unit (19)" is understood as referring to the parameters (P1) and the reference images previously mentioned, reads as follows:

> "processing the data loaded into the self-learning unit (19) in order to determine parameters (P2) relative to the physical properties of the tobacco products in production"

The second paragraph, in which "said parameters" is understood as referring to the parameters (P2), reads as follows:

> "said parameters being calculated on the basis of the predetermined parameters (P1) characteristic of the particular brand and the significant images of the tobacco products" (underlining by the board)

1.2 In the board's view, "reference images" and "significant images" need not necessarily refer to the same images. For example, in the field of optical inspection, reference images may be images which represent a desirable, well-defined appearance or shape of the product to be inspected, whereas significant images as used in the claim may relate to those images

which are particularly relevant to and used in the calculation of the parameters (P2).

Since there is no antecedent in the claim for "the significant images", which gives rise to some unclarity, the description may arguably be referred to in an attempt to interpret the claim. However, the description of the patent specification does not refer to "significant images" at all.

The board is therefore of the view, contrary to the view of the opposition division, see point 1.5 below, that claim 1 includes a method in which the significant images may be a subset of the reference images.

1.3 The patent proprietor argued that the "significant images" would, having regard to paragraphs [0045], [0046] and [0050] of the patent specification, be understood by the skilled reader as being the same as the "reference images". The identical paragraphs in the application as filed, i.e. paragraphs [0044], [0045] and [0049] of the application as published, thus provided a basis for this feature of the claim.

If, for the sake of argument, this interpretation were accepted, the board notes that the embodiment referred to by the paragraphs in question is more specific than the claimed method, since the reference images referred to in these paragraphs are images relating to cigarettes considered to be good and images of cigarettes that do not correspond to the quality parameters or, in other words, relating to defective cigarettes (paragraphs [0045] and [0049] in combination with [0050] of the application as published). The use of reference images is thus only disclosed in combination with the reference images including images

of good and defective cigarettes. Since there is a clear functional relationship between the feature of using reference images for the calculation of the parameters (P2) and the feature of the reference images including images of good and defective cigarettes, the first feature cannot be extracted in isolation from the description. Hence, the omission of the second feature in the claim constitutes an unallowable intermediate generalisation.

1.4 The patent proprietor further argued that paragraphs [0074] to [0077] of the application as published related a further embodiment in which the parameters P2 were calculated off-line based on only one type of image, namely images of good cigarettes.

The board notes however that the preceding paragraphs [0072] and [0073] of the application as published refer to the embodiment using images of good and defective cigarettes and state that the operator would take only a few minutes to select around ten images of "good" filter cigarettes which make up the block needed to establish the parameters P2. Paragraph [0074] then states "To obtain a more accurate determination of these parameters P2, it would be possible to carry out the analyses and calculations by means of an off-line self-learning unit ... on the basis of a number of images of "good" filter cigarettes 11 much greater than the number stored in block B.".

In the board's view, paragraphs [0074] to [0077] thus describe an alternative only for the method step of processing the images of "good" filter cigarettes and do not disclose a further alternative embodiment for setting up the inspection device. This is also supported by the fact that the purpose of the

alternative method step mentioned at the beginning of paragraph [0074] is to obtain a more accurate determination of parameters P2, which is only a limited part of the whole method of setting up the inspection device as claimed.

Paragraphs [0074] to [0077] do not therefore provide a basis for a method of setting up the inspection device not using images of defective cigarettes.

1.5 In its decision, the opposition division came to the conclusion that it was obvious to the skilled person that "significant images" and "reference images" were equivalent. It argued that "significant images" was preceded in claim 1 by the definite article "the" and was therefore meant to refer back to "reference images" previously introduced in the claim. It further argued that this interpretation was evident from the description which only provided support for parameters P2 being calculated based on parameters P1 and on "reference images". Further, the definitions of the "significant images" in claims 3 to 5 as originally filed corresponded to the definition of the "reference images" provided in the description of the application as published in paragraphs [0044], [0045] and [0049].

The board, however, notes that even if in claim 1 "the significant images" were considered to refer to the "reference images", the subject-matter of claim 1 would still extend beyond the content of the application as filed due to the intermediate generalisation, see point 1.3 above. Further, as to the reference by the opposition division to claims 3 to 5 as originally filed, the board notes that, for interpreting granted claims in case of an unclear claim, reference should be made to the patent specification rather than the

application as filed. The claims as granted do not include the expression "significant images", except in claim 1.

The board also notes that the use of the definite article in "the significant images" in claim 1 may well be erroneous and does not necessarily lead to the conclusion that none other than the already introduced "reference images" could have been meant.

1.6 The board therefore concludes that claim 1 as granted comprises subject-matter which extends beyond the content of the application as filed. The ground for opposition pursuant to Article 100(c) EPC therefore prejudices the maintenance of the patent as granted.

2. "New auxiliary request 1 14h" - Article 13(1) RPBA

2.1 The "New auxiliary request 1 14h" (hereinafter the auxiliary request) was filed during the oral proceedings. In accordance with Article 13(1) RPBA, whether or not it is taken into consideration is at the board's discretion. In accordance with well-established case law, one criterion for determining whether or not to consider a late-filed request is whether or not it is *prima facie* allowable.

2.2 The method of claim 1 as granted includes the steps of loading reference images into the self-learning unit and of processing them in order to determine the parameters P2, wherein the parameters P2 are calculated on the basis of the significant images.

Interpreting claim 1 as granted such that the significant images are a subset of the reference images (see point 1.2 above), the method of claim 1 as granted

thus implicitly includes a step of determining which of the reference images are the significant images.

2.3 The method of claim 1 of the auxiliary request includes the steps of loading significant images into the self-learning unit and of processing them in order to determine the parameters P2, wherein the parameters P2 are calculated on the basis of the significant images, i.e. of all images loaded into the self-learning unit.

2.4 Hence, the method of claim 1 of the auxiliary request includes a method in which all images loaded into the self-learning unit are used for the generation of the parameters P2 without further selection. Such a method, however, was not encompassed by claim 1 as granted, which requires the implicit step of determining the significant images out of the reference images, which is irrespective of the possibility that all reference images may be selected as significant images.

2.5 The patent proprietor argued that, following the board's understanding that the significant images were a subset of the reference images, the method of claim 1 of the auxiliary request used less images than the method of claim 1 as granted and that therefore the scope of protection had not been extended.

The board notes, however, that claim 1 as granted and claim 1 of the auxiliary request do not further specify the number or kind of the reference or significant images. The method of claim 1 of the auxiliary request may well use other and or more significant images than the method of claim 1 as granted. Further, even if in certain cases the number of the significant images in the method of claim 1 of the auxiliary request may be lower than in the method of claim 1 as granted, the

omission of the implicit step of determining the significant images removes a limitation which was present in claim 1 as granted.

2.6 The board thus came to the conclusion that claim 1 of the auxiliary request did not *prima facie* comply with the requirements of Article 123(3) EPC.

2.7 As claim 1 of the request was *prima facie* not allowable, the board decided not to admit the "New auxiliary request 1 14h".

3. Conclusion

As there is no allowable request, it follows that the the decision under appeal is to be set aside and the patent is to be revoked.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The patent is revoked.

The Registrar: The Chairman:

G. Rauh F. van der Voort

Decision electronically authenticated