

Internal distribution code:

- (A) [-] Publication in OJ
- (B) [-] To Chairmen and Members
- (C) [-] To Chairmen
- (D) [X] No distribution

**Datasheet for the decision
of 4 September 2023**

Case Number: T 0959/20 - 3.4.02

Application Number: 10736953.0

Publication Number: 2442921

IPC: B07C5/342

Language of the proceedings: EN

Title of invention:

Method for Discerning and Sorting Products Whereby the
Concentration of a Component of These Products is Determined

Patent Proprietor:

Tomra Sorting NV

Former Opponent:

Buhler UK Limited

Relevant legal provisions:

EPC Art. 100(c)

Keyword:

Grounds for opposition - added subject-matter (no)

Decisions cited:

T 0049/11



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
Fax +49 (0)89 2399-4465

Case Number: T 0959/20 - 3.4.02

D E C I S I O N
of Technical Board of Appeal 3.4.02
of 4 September 2023

Appellant: Tomra Sorting NV
(Patent Proprietor) Romeinsestraat 20
3001 Leuven (BE)

Representative: Tomkins & Co
5 Dartmouth Road
Dublin 6 (IE)

Decision under appeal: **Interlocutory decision of the Opposition
Division of the European Patent Office posted on
12 February 2020 concerning maintenance of the
European Patent No. 2442921 in amended form.**

Composition of the Board:

Chair R. Bekkering
Members: F. Giesen
C. Almberg

Summary of Facts and Submissions

I. This appeal by the patent proprietor (appellant) lies from the interlocutory decision of the opposition division of 12 February 2020 concerning the maintenance of European patent No. 2 442 921 in amended form on the basis of the claims of what was then auxiliary request 2.

The application for the patent contained method claims 1 to 21. In the examination proceedings, originally-filed claims 9 and 12 were deleted and corresponding device claims 20 to 38 were added.

An opposition against this patent was filed and then withdrawn on 16 December 2019. The opposition division decided to continue the opposition proceedings of their own motion pursuant to Rule 84(2) EPC.

The grounds for the decision under appeal included that the device claims as granted extended beyond the content of the application documents as originally filed.

II. The appellant requested in writing that

the decision under appeal be set aside and that the patent be maintained as granted.

Oral proceedings were requested only in the event that the board did not accede to this request.

III. Claim 1 of the patent as granted reads as follows:

"Method for discerning and sorting suitable products in a product flow having a certain concentration of a component versus anomalous products having this component in an anomalous concentration, whereby a beam of light strikes these products, the method comprising:

detecting absorption of this beam of light by said component in the products by measuring the intensity of the light reflected by the products at least at two wavelengths between 900 nm and 2500 nm, wherein at least one of said wavelengths is a wavelength where said component shows an absorption peak;

generating a detection signal as a function of a change in the absorption of the beam between two wavelengths;

and identifying a product as an anomalous product if said detection signal exceeds a threshold value."

Claim 20 of the patent as granted reads as follows:

"A sorting machine for discerning and sorting suitable products in a product flow having a certain concentration of a component versus anomalous products having this component in an anomalous concentration, whereby a beam of light (5) strikes these products, the sorting machine comprising:

means (12) for detecting absorption of this beam of light by said component in the products by measuring the intensity of the light reflected by the products at least at two wavelengths between 900 nm and 2500 nm, wherein at least one of said wavelengths is a wavelength where said component shows an absorption peak;

means (12) for generating a detection signal as a function of a change in the absorption of the beam between two wavelengths; and

means for identifying a product as an anomalous product if said detection signal exceeds a threshold value."

Claims 2 to 19 and 21 to 38 are dependent claims.

IV. The arguments of the appellant that are relevant for the present decision can be summarised as follows:

Claims 20 to 38 of the patent as granted did not contain subject-matter extending beyond the content of the application as filed.

In case T 0243/89, the board saw no reason to refuse the filing of an additional method claim for forming the apparatus claimed in claim 1, even at a late stage of the examination proceedings, in view of the use of similar wording and thus the close inter-relationship between the two independent claims. In the present case, the subject matter of device claim 20, which was added in the examination proceedings, was not just similar but identical to that of claim 1 of the granted patent, save for the addition of "means for".

In case T 0049/11, the board concluded that it is well established that subject-matter is not added by a change of claim category *per se*. The relevant question to be answered was whether there was a basis for the new claim category. This was the case here. Page 5, lines 9 to 10, of the application as filed disclosed that "*[a] possible embodiment of a sorting machine for applying the method according to the invention is represented in figure 1*". Furthermore, page 3, lines 18 to 21, of the application as filed disclosed a sorting machine. Moreover, the last paragraph on page 9 and page 10 [*sic*] of the application as filed disclosed that "*[n]aturally, the invention is not restricted to the above-described embodiments of the method and the sorting machine for discerning and sorting products.*"

The opposition division had asserted that claim 20 resulted in a broader scope of protection than the method of claim 1 on account of its use of the expression "means for", and therefore it extended beyond the content of the original disclosure. The appellant argued that if this were the case, many European patents comprising method claims and identical means-plus-function apparatus claims would be rendered invalid. Carrying out the method steps of claim 1 by way of a machine having means for carrying them out as according to claim 20 would infringe the patented method. Consequently, the scope of protection afforded by claim 20 was identical to the scope of protection afforded by claim 1.

Reasons for the Decision

1. *Admissibility*

The appeal meets the requirements of Articles 106 to 108 EPC as well as those of Rule 99 EPC. It is therefore admissible.

2. *Decision in written proceedings*

Since the condition of the appellant's request for oral proceedings is not met, as shown below, and since oral proceedings are not considered expedient in any case, the decision will be handed down in written proceedings (Article 116(1) EPC; Article 12(8) RPBA 2020).

3. *Sole request - amendments*

3.1 The ground for opposition pursuant to Article 100(c) EPC does not prejudice the maintenance of the patent as granted.

3.2 The only question that has to be decided is whether the claims have been amended such that subject-matter has been added which extends beyond the content of the application documents as filed. In the following, all references to the original application documents are to the WO publication.

3.3 The board considers method claim 1, together with the passage on page 3, lines 18 and 19, as well as page 9, lines 27 and 28, of the original description, to be the original disclosure of the subject-matter of claim 20.

- 3.4 Original method claim 1 essentially discloses the method steps of detecting absorption, generating a detection signal and identifying a product as anomalous.

These steps are not disclosed as being limited to any particular way of performing them, such as detecting absorption by means of a photodiode or generating a detection signal as an audible or visible alarm or in a computer.

The corresponding formulations "means for detecting absorption", "means for generating a detection signal" and "means for identifying a product as anomalous" have exactly the same technical content as the method steps. They constitute neither abstractions nor generalisations. The only difference is that they have been adapted to the category of a device claim by the use of a "means plus function" formulation.

The board agrees with the reasoning in T 0049/11, Reasons 4, according to which as long as there is an original disclosure of the category of the added claims, the change of category *per se* does not amount to adding subject-matter that goes beyond the content of the application as filed. Furthermore, the board agrees with the appellant that the application as filed discloses a machine for discerning and sorting suitable products in a product flow. Thus, the addition of claims with a new category has not resulted in subject-matter going beyond the content of the original application.

- 3.5 The grounds set out in the decision under appeal are not convincing.

The opposition division argued that the formulation "means for" plus function did not limit the claimed means to a particular component or product. All that such a formulation required was a means suitable for achieving the stated function.

The decision goes on to conclude that

"[t]he mere suitability of the sorting machine to carry out the method defined in claim 1 as granted, the scope of protection of apparatus claim 20 as granted is broader than that defined in granted claim 1, extending therefore beyond the content of the original disclosure".

3.6 When taking this argument at face value, it conflates the question of the extent of the scope of protection with the question of added subject-matter.

It cannot legitimately be concluded from the fact that one claim has a broader scope of protection than another claim that the former contains added subject-matter. For the same reason, the argument presented by the appellant concerning a hypothetical infringement scenario, and the assertion that many European patents would be rendered invalid if the opposition division's stance were correct, is not relevant to the question to be decided. Since the sole request concerns the claims amended before grant, the provisions of Article 123(3) EPC are not to be examined in this respect.

While this is less important, the board wishes to add that it has difficulties in accepting the assertion that *"the scope of protection of apparatus claim 20 as granted is broader than that defined in granted*

[method] claim 1". The board is doubtful that an underlying metric exists that would allow the extent of the scope of protection of a product claim and that of a method claim to be reasonably compared, since the scopes of these claim categories are different by definition.

- 3.7 However, even when construing the above statement from the decision under appeal to mean that the product claim contained abstractions or generalisations of the originally disclosed method, thus adding subject-matter, the board is not convinced by the opposition division's argument. The opposition division reasoned that the "means plus function" features were not limited to particular components or products. While this is correct, the method steps of claim 1 of detecting light, generating a signal and identifying an anomalous product are not limited in any way to particular implementation details or physical components. In particular, they do not contain a limitation as to how each step is to be performed. Rather, they state the steps in a functional and general manner. For example, if the method claim had defined "detecting light with a photodiode", then it may have been justified to object to using this feature as a basis for "means for detecting light" in general, because this would have represented an abstraction from detecting light by a photodiode, and thus potentially could have contained added subject-matter. However, the method steps of present claim 1 are not limited. Rather, they are formulated so as to cover any way of detecting light, generating a signal and identifying an anomalous product.

The opposition division further reasoned that the sorting machine as defined in granted claim 1 was not

restricted to the use of a particular product, with respect to which a proper selection of wavelengths was necessary in order to carry out the sorting the method required. Again, the board fails to see in what way this constitutes added subject-matter as compared to the original method claim, which similarly is not restricted to any specific product. Both the method claim and the product claim define an absolute wavelength range, rather than defining this range with respect to the product to be sorted. If the product to be sorted and identified does not have an absorption peak in the claimed wavelength range, the method will not work. Nothing else happens in the context of the claimed sorting machine.

As far as an original disclosure of the category "machine" is concerned, it is directly and unambiguously derivable from the steps of the claimed method as originally filed that in practice these steps are executed automatically or, in other words, by a machine. Light in the claimed non-visible wavelength range cannot be detected by a human without using some sort of light detector. Likewise, generating a detection signal would clearly be understood by a skilled person as referring to the output of a device, not to any human activity. Therefore, stating that these steps are executed by a means for executing them does not add any new information; rather, it merely constitutes an adaptation to the claim category of a device claim.

The appellant argued further that the passages on page 5, lines 9 and 10, page 3, lines 18 to 21, and the passage that reads "*Naturally, the invention is not restricted to the above-described embodiments of the method and the sorting machine for discerning and*

sorting products", which can be found on page 9, lines 27 and 28, represented the original disclosure of the sorting machine according to claim 20. The opposition division had come to the conclusion that this passage referred to a specific embodiment of the machine as shown in Figure 1.

The board is not convinced by the reasoning given in the decision under appeal. A skilled person is presented with the original disclosure of the method claim by the passage on page 3, lines 18 and 19, which reads as follows:

"Figure 1 is a schematic view in perspective of a sorting machine to apply the method according to the invention."

Furthermore, the passage on page 9, lines 27 and 28, discloses that the machine is not restricted to the embodiments presented. Therefore, a skilled person would directly and unambiguously have understood that the most general form of a sorting machine is one that applies the method as claimed in claim 1 as originally filed and that is not limited in such a way that it has all of the implementation details of the embodiment. Given that no objections were raised against the amendments to the original method claim resulting in claim 1 as granted, the conclusion in the decision under appeal that the amendment results in an unallowable intermediate generalisation is therefore not persuasive.

3.8 No other objections were raised against the patent as granted by the opposition division.

4. *Conclusion*

Since the ground for opposition according to Article 100(c) EPC does not prejudice the maintenance of the patent as granted, the board accedes to the appellant's sole request.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The patent is maintained as granted.

The Registrar:

The Chair:



L. Gabor

R. Bekkering

Decision electronically authenticated