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**Datasheet for the decision
of 22 October 2015**

Case Number: T 2095/10 - 3.5.07

Application Number: 03811173.8

Publication Number: 1573591

IPC: G06F17/30

Language of the proceedings: EN

Title of invention:

A method of tracking in production in a plant for liquid foods

Applicant:

Tetra Laval Holdings & Finance S.A.

Headword:

Tracking liquid food production/TETRA LAVAL HOLDINGS & FINANCE

Relevant legal provisions:

EPC Art. 56, 84, 111(1)

Keyword:

Inventive step -
main request, first and second auxiliary requests (no)
Clarity - third auxiliary request (no)
Remittal to the department of first instance - (no)

Decisions cited:

J 0006/98

Catchword:



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Case Number: T 2095/10 - 3.5.07

D E C I S I O N
of Technical Board of Appeal 3.5.07
of 22 October 2015

Appellant: Tetra Laval Holdings & Finance S.A.
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Decision under appeal: **Decision of the Examining Division of the European Patent Office posted on 27 May 2010 refusing European patent application No. 03811173.8 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman R. Moufang
Members: R. de Man
P. San-Bento Furtado

Summary of Facts and Submissions

- I. The applicant (appellant) appealed against the decision of the Examining Division refusing European patent application No. 03811173.8, which was filed as international application PCT/SE2003/001755 and published as WO 2004/044777.

- II. The Examining Division decided that the subject-matter of claim 1 of the sole request before it lacked inventive step both in view of the common general knowledge of the skilled person and in view of the following document:

D3: US 4 275 383, 23 June 1981.

- III. With the statement of grounds of appeal, the appellant filed a clean copy of the set of claims refused by the Examining Division as a main request and additionally filed first, second and third auxiliary requests.

- IV. In a communication accompanying a summons to oral proceedings, the Board expressed as its preliminary opinion that the subject-matter of claim 1 of each request lacked inventive step and that the subject-matter of claim 1 of the first and third auxiliary requests infringed Article 123(2) EPC.

- V. With a letter dated 22 September 2015, the appellant resubmitted the main request and first auxiliary request and replaced the second and third auxiliary requests with new second and third auxiliary requests.

- VI. Oral proceedings were held on 22 October 2015. At the end of the oral proceedings, the chairman pronounced the Board's decision.

VII. The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of the claims of the main request or, alternatively, on the basis of the claims of one of the first to third auxiliary requests. The appellant further submitted the following procedural request:

"We request remittal to the examining division if the BoA find any request to contain further technical features than those acknowledged by the examining division, in order to allow full inventive step discussions."

VIII. Claim 1 of the main request reads as follows:

"A method of tracking progress of liquid food through a liquid food production plant including production units (1), each production unit consisting of processing equipment or a tank, and conduits for transport of liquid food to and from production units, the method comprising the steps of:

allocating a respective identity (2) to each production unit (1) in the plant and registering the identities (2) in a database;

allocating to each liquid food quantity (3) in the production plant a respective identity (4) representative of the quantity and the product content (5) of the liquid food quantity (3), and registering the identities (4) in the database;

in the course of progress through the production plant liquid food quantities being combinable and/or

divisible to form new liquid food quantities having corresponding identities (4) allocated thereto;

allocating to each transfer of a liquid food quantity from a source production unit (1) to a destination production unit an event identity (7) representative of the liquid food quantity transferred and the source and destination production units, and registering the event identities (7) in the database;

and tracking the progress of the liquid food quantities (3) through the production plant by reference to the production unit identities (2), the event identities (7) and the liquid food quantity identities (4) registered in the database, and producing a visual record thereof."

IX. Claim 1 of the first auxiliary request differs from claim 1 of the main request in that the following text has been inserted after "allocating to each transfer ... in the database;":

"whereby a liquid food quantity (4) and an event identity (7) must be allocated and registered in the database before a transfer of a liquid food quantity (3) can proceed; and".

X. Claim 1 of the second auxiliary request differs from claim 1 of the main request in that the wording ", and producing a visual record thereof." has been replaced with the following text:

"along with the time interval during which each transport/event occurs, and producing a visual record representing the liquid food flow and event sequence in

the plant, thereby enabling identification of the contents of liquid food at any point in the plant."

- XI. Claim 1 of the third auxiliary request differs from claim 1 of the second auxiliary request in that the following text has been added at the end of the claim:

"and wherein an identity of a liquid food quantity (4) may consist of a washing of a production unit (1), said liquid food identity (4) having no source and no destination."

- XII. The appellant's arguments relevant to this decision are discussed in detail below.

Reasons for the Decision

1. The appeal complies with the provisions referred to in Rule 101 EPC and is therefore admissible.
2. *The invention*
 - 2.1 The invention relates to tracking production in a liquid food production plant. As explained on page 1, lines 8 to 15, of the published application, in food production plants there is a need for some form of tracking so that it is possible to obtain information about the raw materials that went into a particular finished product. Such tracking capabilities may be required by law. In certain food production plants, such as those within the meat industry, tracking can be performed in a simple manner by marking food items with food-approved stamps which can be read off both manually and by machine. But this approach is not suitable for liquid food plants.

- 2.2 For liquid food plants, such as dairies and juice factories, one prior-art tracking method allocates to each transport of a quantity of liquid food within the plant a time and date stamp of the start and stop times of the transport (see page 1, lines 16 to 23, of the published application). The required information can then be obtained by comparing different time and date stamps. This method is said to have the drawback that it cannot be employed if a transport, for some reason, is delayed.
- 2.3 The background section of the application further discusses the "batch identification method", which is used extensively within the pharmaceuticals industry. This method is said to be too inflexible for use in the dairy industry, in which it is not uncommon to fill a tank (corresponding to one batch) and simultaneously empty that tank (corresponding to another batch).
- 2.4 The liquid food production plant considered in the application includes production units in the form of processing equipment or tanks, and conduits for transport of liquid food to and from production units. According to the claimed invention, tracking is performed by allocating identities to production units, to liquid food quantities and to transfers of a liquid food quantity from one production unit to another. These identities are registered in a database. From the content of this database visual records of the progress of liquid food quantities may be generated.
- 2.5 As the appellant explained at the oral proceedings, the information recorded in the database will not normally make it possible, for example, to trace back with certainty the origin of every molecule of the final

liquid food product, as that is simply impossible given the nature of the production process. However, the recorded information does make it possible to reconstruct the steps of the production process. If something is found to be or to have been wrong with the content of a particular production unit, it is possible to determine the liquid food quantities entering the production plant that may have been responsible for the problem and the final liquid food products that may be affected by the problem.

3. *Main request - inventive step*

3.1 The Examining Division found the subject-matter of claim 1 to lack inventive step essentially because the claim defined an obvious implementation, based on conventional data processing and data storage means, of a non-technical organisational or administrative procedure.

3.2 Claim 1 relates to a method of tracking the progress of liquid food quantities through a production plant. The production plant comprises production units which include processing equipment and tanks, and conduits for transport of liquid food to and from production units. As liquid food quantities progress through the production plant, they are combined or divided to form new liquid food quantities, and they are transferred from source production units to destination production units.

The Examining Division did not cite prior art showing that such liquid food production plants were known at the priority date of the present application. However, the Board considers liquid food production plants defined at this level of generality to be notorious

knowledge in the sense that it cannot reasonably be disputed that such production plants existed at the relevant date. Dairy factories, for example, undoubtedly existed, and such factories comprised processing equipment, tanks and conduits, and at certain points in the production process food quantities were combined or divided. In addition, the appellant agreed that such liquid food production plants were known (see e.g. paragraph 7.6.1 of the appellant's letter dated 22 September 2015).

- 3.3 According to the appellant, the claim term "tracking" referred to producing a record of the progress of liquid food quantities through the liquid food production plant. The term implied that the time intervals during which transfer events occurred were recorded as well, because when tracking an object it was useless to know the location of the object without knowing the time at which the object was at that location.

Since the application as filed discloses in Figure 2 and on page 5, lines 1 to 3, that the recorded data includes time intervals during which transfer events occurred and since, moreover, the filing of the second auxiliary request shows that the appellant was willing to explicitly recite this feature in the independent claim, for the purpose of assessing inventive step the Board accepts the appellant's interpretation of "tracking".

- 3.4 With this interpretation of claim 1, the Board agrees with the appellant that the method of claim 1 is not merely the obvious implementation of a non-technical organisational or administrative procedure that is performed independently of the physical process taking

place in the liquid food production plant. In particular, the claimed method provides data about a technical process in that it collects and records start and stop times of transfer events occurring during the food production process.

However, as set forth below and in line with the appellant's position that the recording of time intervals is implicit in the well-known notion of "tracking", the Board considers that this technical feature alone cannot support an inventive step.

- 3.5 In the Board's view, a notorious liquid food production plant as discussed in point 3.2 above is a suitable starting point for the assessment of inventive step.

As explained in the background section of the application on page 1, lines 8 to 11, in food production plants there is, and at the priority date was, a general need, often as the result of legislation, for some form of production tracking. In the Board's view, the most basic form of tracking of the production process is keeping a log of the relevant production events together with their start and stop times. At the priority date, the skilled person would have stored such a log in a (computer-implemented) database.

In the case of a liquid food production plant, typical production events include the transfers of liquid food quantities from one production unit to another. In order to log such transfer events, it is an obvious possibility to allocate to each production unit a production unit identifier, i.e. an "identity", and to record a transfer event by recording the identities of the source production unit and of the destination

production unit. It is further obvious to record the amount and content of the liquid food transferred, as these are essential characteristics of the transfer event.

- 3.6 Claim 1 specifies that, in addition to the allocation of identities to production units, identities are also allocated to each transfer (event) and to each transferred liquid food quantity.

Since a transfer event is already uniquely determined by the identities of its source and destination production units in combination with the time interval during which the transfer took place, the allocation of "event identities" to transfer events is merely a matter of administrative convenience. Such identities may be allocated (and registered in the database) at the time the transfer events are registered, but may equally be allocated at a later time.

Similarly, each liquid food quantity transferred between production units is uniquely identified by the corresponding transfer event. The allocation of separate "liquid food quantity identities" to liquid food quantities, at the time the transfer events are registered or later, is therefore likewise a matter of administrative convenience. If the amount and content of transferred liquid food are recorded as part of the transfer event data, such identities will be "representative of the quantity and the product content of the liquid food quantity" as specified in claim 1.

The Board therefore considers that the claimed steps of allocating identities to transfer events and to liquid food quantities, whether they are performed during or after production, do not technically improve or control

the claimed tracking method but constitute non-technical administrative measures having an obvious implementation.

3.7 Claim 1 further specifies that a "visual record" of the recorded information is produced. However, it is obvious to communicate the recorded information for cognitive processing to a user in a "visual" form.

3.8 The appellant argued that tracking liquid food production in a production plant wherein liquid food quantities were combinable and/or divisible and wherein one liquid food quantity could be delivered into a tank while simultaneously another liquid food quantity could be discharged from the tank involved considerable technical difficulties. The skilled person would therefore consider the option of modifying the production process to make it suitable for the batch identification method (see point 2.3 above).

The Board need not decide whether the skilled person would seriously consider replacing the conventional liquid food production process with a batch process, which would lead to a considerable loss in production efficiency. Even if that were an option for the skilled person, he would also (and foremost) attempt to implement a method of tracking production without modifying the existing production process. As explained in points 3.5 and 3.6 above, the Board considers that the skilled person would, essentially as a matter of course, keep a log of the production events taking place in the production plant and thereby arrive at the essence of the claimed tracking method.

3.9 For these reasons, the subject-matter of claim 1 of the main request lacks inventive step (Articles 52(1) and 56 EPC).

4. *First auxiliary request - inventive step*

4.1 Claim 1 of the first auxiliary request adds to claim 1 of the main request the feature "whereby a liquid food quantity identity (4) and an event identity (7) must be allocated and registered in the database before a transfer of a liquid food quantity (3) can proceed".

4.2 This amendment is based on the description of the application on page 3, lines 27 to 32. This passage states that "before anything happens in the plant", material quantity identities and event identities must be allocated. In particular, "the driver of a road tanker arriving at the dairy may not empty his road tanker before the contents of the road tanker have been allocated an identity 4 and that [sic] the emptying procedure which constitutes an event has been allocated its identity number".

The feature hence refers in particular to rules to be obeyed by the operators of the plant.

4.3 As noted in point 3.6 above, provided that the essential data of transfer events is properly recorded there is no technical reason why the event identity and the liquid food quantity identity corresponding to a particular transfer event cannot be allocated at a time after the transfer event took place. Nevertheless, it is certainly possible to allocate them at the time of the transfer event or, as now claimed, immediately before. Since the added feature does not bring any surprising advantage, it constitutes an obvious choice.

- 4.4 Thus the subject-matter of claim 1 of the first auxiliary request lacks inventive step (Articles 52(1) and 56 EPC).
5. *Second auxiliary request - inventive step*
- 5.1 Claim 1 of the second auxiliary request adds to claim 1 of the main request that
- (i) time intervals during which each transfer event occurs are registered in the database; and
 - (ii) the produced visual record represents "the liquid food flow and event sequence in the plant, thereby enabling identification of the contents of liquid food at any point in the plant".
- 5.2 The Board has already taken feature (i) into account in the assessment of inventive step of the subject-matter of claim 1 of the main request (see point 3.3 above).
- 5.3 Feature (ii) limits the produced "visual record" essentially in the sense that it must give a sufficiently complete overview of the recorded information to enable "identification of the contents of liquid food at any point in the plant" as explained in point 2.5 above. Since it is generally obvious to display information as completely as possible, this feature cannot support the presence of an inventive step.
- 5.4 The subject-matter of claim 1 of the second auxiliary request hence lacks inventive step (Articles 52(1) and 56 EPC).

6. *Third auxiliary request - clarity*

6.1 Claim 1 of the third auxiliary request adds to claim 1 of the second auxiliary request that "an identity of a liquid food quantity (4) may consist of a washing of a production unit (1), said liquid food identity (4) having no source and no destination". This amendment is based on original dependent claim 7.

6.2 The term "washing" refers to the washing or cleaning of a production unit (see the description on page 5, lines 11 to 15). A washing is hence an event occurring in the food production plant and certainly not a "liquid food quantity". Yet the added feature of claim 1 specifies that a liquid food quantity identity may "consist" of a washing of a production unit.

The description on page 5, lines 11 to 15, discloses that a washing or cleaning may be "indicated" with a material quantity identity and that such an identity "constitutes the washing, CIP (Cleaning in Place)".

6.3 Even accepting that "an identity of a liquid food quantity may consist of a washing" is to be understood as meaning that a liquid food quantity identity is to be allocated to a washing event, it remains unclear why "liquid food quantity identities" are not reserved for "liquid food quantities" but are also associated with certain production events. The feature hence casts doubt on the meaning and purpose of "liquid food quantity identities".

6.4 Thus claim 1 of the third auxiliary request is not clear (Article 84 EPC).

7. *Request for remittal to the Examining Division*

7.1 At the oral proceedings, after the Board had expressed a negative view on the main request and the first to third auxiliary requests while noting that its reasoning with respect to inventive step for in particular the second auxiliary request deviated from that of the Examining Division (see point 3.4 above), the appellant requested that the case be remitted to the Examining Division "if the BoA find any request to contain further technical features than those acknowledged by the examining division, in order to allow full inventive step discussions".

7.2 Although the condition formulated by the appellant is fulfilled, the Board does not accede to its request for remittal of the case. The Board's reasoning as compared to that of the Examining Division does not rely on an entirely different set of facts, and the fact that the Board has accepted some of the appellant's arguments cannot have surprised the appellant. Unlike the Examining Division, the Board starts from a notorious liquid food production plant as closest prior art (see points 3.2 and 3.5 above), but the appellant was informed of this approach by the Board's communication. The appellant was therefore in a position to fully plead its case.

In so far as the appellant's request for remittal relies on the "right to two instances", the Board notes that under the EPC this right is not absolute in the sense that a party in all circumstances is entitled to have every aspect of its case examined by two instances (see e.g. decision J 6/98 of 17 October 2000, reasons 4).

7.3 The Board therefore decides to exercise its discretion under Article 111(1) EPC and to take a final decision on the case.

8. *Conclusion*

Since none of the substantive requests on file is allowable, the appeal is to be dismissed.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



I. Aperribay

R. Moufang

Decision electronically authenticated