Internal distribution code:

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

Datasheet for the decision of 6 October 2020

Case Number: T 0232/14 - 3.5.01

Application Number: 09722519.7

Publication Number: 2272038

IPC: G06Q30/00

Language of the proceedings: EN

Title of invention:
METHOD AND APPARATUS FOR IDENTIFYING, AUTHENTICATING, TRACKING AND TRACING MANUFACTURED ITEMS

Applicant:
INEXTO SA

Headword:
Method and apparatus for identifying, authenticating, tracking and tracing manufactured items/INEXTO SA

Relevant legal provisions:
EPC Art. 56, 111(1)

Keyword:
Inventive step - determining ranges of unit identifiers (no - not technical and obvious) - technical effect of saving storage (no - bonus effect)
Appeal decision - remittal to the department of first instance (no)

Decisions cited:
T 0641/00, T 0144/11, T 1463/11

Catchword:
The Board judges that using ranges of unit identifiers to label a number of (consecutive) unit identifiers of manufactured items is, at the level of generality at which it is claimed, on the business side of the line between technical and non-technical subject-matter (see e.g. T 144/11 - *Security rating System / SATO MICHIHIRO*, points 2.1, and 3.6 to 3.9). (See point 2.5 of the reasons)

The ranges of unit identifiers *do have* a meaning for the business person. They correspond to *batches* of units produced on a production line. (See point 2.6 of the reasons)

Even if the "determining of ranges of unit identifiers" achieved a technical effect, such as reducing data storage and data bandwidth requirements, it is a matter of routine design for the skilled person, a software programmer or a database expert, based on common general knowledge to store the first and the last element of a list of items, instead of the whole list. (See point 2.9 of the reasons)

Europäisches Patentamt
European Patent Office
Office européen des brevets

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 0232/14 - 3.5.01

D E C I S I O N
of Technical Board of Appeal 3.5.01
of 6 October 2020

Appellant: (Applicant)	INEXTO SA Avenue Edouard-Dapples 7 1006 Lausanne (CH)
Representative:	Cabinet Beau de Loménie 51 avenue Jean Jaurès BP 7073 69301 Lyon Cedex 07 (FR)
Decision under appeal:	**Decision of the Examining Division of the European Patent Office posted on 18 September 2013 refusing European patent application No. 09722519.7 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman	W. Chandler
Members:	N. Glaser
	P. Schmitz

Summary of Facts and Submissions

I. This appeal is against the decision of the examining division to refuse the European patent application No. 09722519.7 pursuant to Article 97(2) EPC on the ground of lack of inventive step (Article 56 EPC).

II. In the statement setting out the grounds of appeal, the appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of the refused main or auxiliary request 1, or auxiliary request 2 filed therewith.

III. In a communication accompanying the summons to oral proceedings, the Board set out its preliminary opinion that the invention seemed not to involve an inventive step (Article 56 EPC).

IV. In a reply, the appellant gave further arguments in favour of inventive step and filed an auxiliary request 3.

Additionally, the appellant requested that the case be remitted to the examining division if the Board acknowledged the technical character of the distinguishing features in order to examine inventive step taking into account all the features which contribute.

V. Oral proceedings took place on 6 October 2020 by videoconference. At the end of the oral proceedings, the Chairman announced the decision.

VI. Independent claim 1 of the main request reads as follows:

"*1. A method for identifying manufactured items in containers, each container suitable for containing two or more units, the method comprising the steps of:*

at a production line, uniquely identifying each unit by marking each unit with a unique unit identifier;

at the production line, allocating two or more units to be contained in each container;

at the production line, uniquely identifying each container by marking each container with a unique container identifier;

for each container, determining one or more ranges of unit identifiers of the two or more units allocated to the container; and

storing, in a database, a container identifier for each container, each container identifier being coupled, in the database, to the one or more ranges of unit identifiers of the two or more units allocated to the container."

Auxiliary request 1 adds to claim 1 of the main request a "*central server*" as the location of the database and the following additional steps "*at the production line, reading the unique unit identifiers and the unique container identifiers*" and "*sending the unique unit identifiers and the unique container identifiers to a central server*" after the marking step of claim 1.

Auxiliary request 2 adds to claim 1 of the first auxiliary request that the "*unique unit identifier*" comprises *"production details including an incremental counter value*".

Auxiliary request 3 adds to claim 1 of the second auxiliary request that "*each unique identifier is an encrypted version of production details associated with the respective unit*".

Reasons for the Decision

1. Background of the invention

1.1 The invention relates to the identification of specially taxed or branded manufactured items (also called units or cartons, e.g. cigarette cartons), packaged into containers (also called cases). Identification allows products to be authenticated as genuine, tracked and traced, which helps to detect contraband and counterfeit products (paragraph bridging pages 2 and 3 of the original description).

1.2 Conventional identification systems stored an individual record of the identifier for each item in the container together with its associated container identifier (see Table 1). This required a large amount of data storage.

1.3 The invention essentially replaces the individual records with ones representing any contiguous ranges of identifiers for items packed in a container. Since items are generally packed as they are produced, there are fewer ranges than items and thus fewer records in the database.

1.4 In the embodiment partially claimed in auxiliary request 2, the item identifier contains production

details (e.g. date and time to the nearest minute) only differing by a count value (e.g. of items produced in the given minute). The ranges are simply stored as records containing the respective production details and the beginning and the end values of the counter together with the corresponding container identifier, as shown in Table 3.

2. Main request

2.1 The examining division refused claim 1 of the main request for a lack of inventive step (Article 56 EPC) over the prior art acknowledged in the description, page 1, line 28, to page 2, line 18, which cites WO 2006/038114. This document corresponds to EP 1 645 992 (D1) which was cited by the examining division.

2.2 The Board agrees with the appellant that inventive step of claim 1 should be judged, as the division did, according to the problem and solution approach for mixed-type claims as set out in T 641/00 (Two identities/COMVIK). The COMVIK approach was further refined in T 1463/11 (Universal merchant platform/ Cardinal Commerce).

2.3 It is common ground that claim 1 differs from the closest prior art by the last two features of claim 1, that is, "*for each container, determining one or more ranges of unit identifiers of the two or more units allocated to the container*" and "*storing, in a database, a container identifier for each container, each container identifier being coupled, in the database, to the one or more ranges of unit identifiers of the two or more units allocated to the container.*"

2.4 However, there is disagreement whether the determination of ranges of unit identifiers is technical or not.

The examining division considered this feature was part of the requirement specification of an administrative scheme for the identification of manufactured items in containers.

The appellant argued that ranges of unit identifiers did not have a meaning for the business person because they did not exist in the business area. They would be used in combination with production details and only for saving storage space, which was a technical contribution. This further enabled an authentication process to be implemented for products which were produced in very high numbers using standard data processing equipment, paragraph 4.6 of the grounds of appeal. Thus the requirement specification could only be formulated along the lines of "*we need an identification and authentication system like we have for products that are shipped in containers, but which can be implemented practically and economically for very high volume units, such as cigarette packs*", paragraph 4.5.

2.5 The Board however agrees with the examining division that this feature belongs to the business specification. The Board judges that using ranges of unit identifiers to label a number of (consecutive) unit identifiers of manufactured items is, at the level of generality at which it is claimed, on the business side of the line between technical and non-technical subject-matter (see e.g. T 144/11 - *Security rating System / SATO MICHIHIRO*, points 2.1, and 3.6 to 3.9).

2.6 The ranges of unit identifiers *do have* a meaning for the business person. They correspond to *batches* of units produced on a production line. This is apparent from Table 2 of the application, where a first batch is produced at 10:11 and a second batch at 10:12. In Example 1 on page 14 of the application, ranges of counter values correspond to cartons which were produced in the same time period. In Example 3 on page 15, the ranges correspond to cartons produced in batches of different production lines. In Example 2 on page 15, the ranges correspond to as many individual cartons as are packed together into one shipping case. The ranges of unit identifiers in all examples are not different from the general understanding of what a *batch* is in production, see, for example, D1, paragraph [0023]. Therefore the determination of ranges of unit identifiers is rather linked to the number of possible ways of organising items of a group of items based on how they are produced, that is, the number of *batches*, than to the way in which data can be stored.

2.7 The Board agrees with the examining division that the use of an (electronic) database for the storage of data, that is, the ranges of unit identifiers, was a straight-forward consequence of the requirement specification when implementing it on a data processing system, such as the one cited in the prior art. An (electronic) database was known in the prior art, for example, from WO 2006/038114, page 7, lines 5 to 11, and D1, paragraphs [0031] to [0032], where a checking center 30 receives and centralises product data, and has access to database 31, page 15, lines 13 to 15, and D1, paragraph [0065]. The person skilled in the art when implementing the business requirements would straight-forwardly store in the database a container identifier for each container, each being coupled, in

the database, to the one or more ranges of unit identifiers allocated to the container. The saving in storage space is a mere "bonus effect".

2.8 The Board therefore concludes that the subject-matter of claim 1 of the main request lacks an inventive step (Article 56 EPC).

2.9 The Board does not come to a different conclusion even if the "determining of ranges of unit identifiers" achieved a technical effect, such as reducing data storage and data bandwidth requirements.

It is a matter of routine design for the skilled person, a software programmer or a database expert, based on common general knowledge to store the first and the last element of a list of items, instead of the whole list. If a list comprised non-consecutive numbers with numbers missing, then the skilled person would recognise without requiring inventive skills that several ranges can be defined to exclude the missing numbers. In an example of a list of items ranging from 1 to 50 with missing numbers 11, 12, 33, 34 and 35, the skilled person would store three ranges from 1 to 10, 13 to 32 and 36 to 50.

3. First auxiliary request

3.1 Claim 1 of this request essentially adds a *central server* to claim 1 of the main request. The central server determines the ranges of the unit identifiers and the range data is stored together with the container identifiers. The method includes additional steps of reading the identifiers at the production line and sending them to the central server.

3.2 The appellant argued that this amendment clarified that the invention provided a technical solution by automatically determining one or more ranges of unit identifiers of the units allocated to a container and storing those ranges in a database in a central server.

3.3 The Board agrees with the examining division that this feature does not lead to inventive subject-matter. WO 2006/038114, page 6, line 31, to page 7, line 6, and D1, paragraph [0030], disclose that a central server 15 and also a checking center 30 may act as a central entity in generating the codes, page 7, lines 15 to 22, and D1, paragraph [0033].

3.4 Accordingly, claim 1 of the first auxiliary request does not involve an inventive step.

4. Second auxiliary request

4.1 Claim 1 of this request essentially adds that each unique identifier comprises *production details including an incremental counter value*.

4.2 The appellant argued that this amendment emphasised that unique unit identifiers were specifically formatted to allow them to be sorted into ranges of unit identifiers.

4.3 The Board cannot recognise that the sorting of the unique identifiers into ranges is facilitated. When incrementally counting the units produced in a batch, it is a logical and necessary way to define ranges of those units. If these units were not incrementally identified, the associated range would have gaps and authentication could be erroneous.

4.4 Furthermore, the storage of production details is known from WO 2006/038114, page 14, line 30, to page 15, line 1, and D1, paragraph [0063]. Either document discloses various types of unit identifiers, see WO 2006/038114, page 8, lines 13 to 33 and D1, paragraphs [0037] and [0038], and counting packaged units, paragraph [0029].

4.5 The appellant further argued that unit identifiers served to identify in which container a unit was packed. It was a one-to-one relationship between container and unit.

4.6 The Board disagrees. When storing container identifiers, e.g. shipping case identifiers, and ranges of counter values, as shown in Table 3 of the application, this one-to-one relationship is not necessarily maintained. Page 13, lines 5 to 8, of the application explains that the counter is reset every minute of producing cartons. It is possible that the same counter value refers to different cartons which were produced at different times.

4.7 Accordingly, claim 1 of the second auxiliary request does not involve an inventive step.

5. Third auxiliary request

5.1 Claim 1 of this request essentially adds that each unique identifier is *an encrypted version* of production details associated with the respective unit.

5.2 The appellant argued that this amendment made it possible to hide production details. For instance, the data shown in column 1 in Table 2 of the application shows encrypted carton identifiers which are typically printed on cigarette packs.

5.3 The Board considers that the encryption of unique identifiers for the sake of data protection is a partial problem which is independent of any potential data storage problem.

5.4 Encrypting data for security purposes, such as protecting it against misuse or falsification, is a well-known technical concept in the field of data processing. Furthermore, the encryption of identifiers of cigarette packs is known from D1, paragraph [0040].

5.5 Accordingly, claim 1 of the third auxiliary request does not involve an inventive step.

6. Remittal

6.1 The appellant requests a remittal of the application in order for the first instance to make the assessment of inventive step, if the Board finds the features "determining one or more ranges of unit identifiers" and the step of "coupling in a database the ranges of unit identifiers to a corresponding container identifier" in claim 1 of the main request to be technical.

6.2 According to Article 111(1) EPC, the Board may either exercise any power within the competence of the examining division or remit the case. The Board does not see a need for a remittal because the Board essentially agrees with the examining division's assessment of technicality and there is no need for an additional search. Thus, there are no special reasons which would necessitate a remittal (Article 11 RPBA 2020).

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

T. Buschek W. Chandler

Decision electronically authenticated