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Datasheet for the decision of 2 April 2014

Case Number: T 1635/10 - 3.2.07

Application Number: 05732311.5

Publication Number: 1794072

IPC: B65G57/06

Language of the proceedings: EN

Title of invention:
HANDLING UNIT FOR PALLETIZING

Patent Proprietor:
Blue Horizon GmbH & Co. KG

Opponent:
MSK-Verpackungs-Systeme GmbH

Headword:

Relevant legal provisions:
EPC Art. 54(1), 56
RPBA Art. 12(4), 13(1)

Keyword:
Novelty - main request (no)
Inventive step - auxiliary request 1 (no)
Late filed auxiliary request 2 - admitted (no)
Late filed auxiliary request 3 - inventive step (yes)
Handwritten amendments to documents for the maintenance of the patent - admitted (yes) (see point 5)

Decisions cited:

Catchword:

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Beschwerdekammern
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Chambres de recours

European Patent Office
D-80298 MUNICH
GERMANY
Tel. +49 (0) 89 2399-0
Fax +49 (0) 89 2399-4465

Case Number: T 1635/10 - 3.2.07

D E C I S I O N
of Technical Board of Appeal 3.2.07
of 2 April 2014

Appellant: (Opponent)	MSK-Verpackungs-Systeme GmbH Benzstrasse D-47533 Kleve (DE)
Representative:	Rohmann, Michael Andrejewski - Honke Patent- und Rechtsanwälte An der Reichsbank 8 45127 Essen (DE)
Respondent: (Patent Proprietor)	Blue Horizon GmbH & Co. KG Friedensstrasse 17B 63533 Mainhausen (DE)
Representative:	Matias, Bruno M. MERH-IP Matias Erny Reichl Hoffmann Paul-Heyse-Strasse 29 80336 München (DE)
Decision under appeal:	**Decision of the Opposition Division of the European Patent Office posted on 18 May 2010 rejecting the opposition filed against European patent No. 1794072 pursuant to Article 101(2) EPC.**

Composition of the Board:

Chairman: H. Meinders
Members: G. Patton
O. Loizou

Summary of Facts and Submissions

I. The appellant (opponent) lodged an appeal against the decision of the opposition division to reject the opposition against the European patent No. 1 794 072.

The opposition was filed against the patent as a whole and was based on Article 100(a) EPC (lack of novelty and lack of inventive step).

The Opposition Division held that these grounds did not prejudice the maintenance of the patent as granted.

II. With its reply to the grounds of appeal the respondent (patent proprietor) requested to dismiss the appeal.

The Board provided the parties with its preliminary non-binding opinion that the subject-matter of independent claim 1 of the patent as granted was considered to be lacking novelty over D1 and inventive step in view of D1 or D3.

Both parties reacted, the respondent filing a main request(=patent as granted) and auxiliary requests 1 to 8 with its letter dated 20 September 2013, subsidiarily requesting oral proceedings if one of the requests was to be rejected.

After the Board had summoned the parties to oral proceedings, they both took position again, the appellant filing a new document D4.

III. Oral proceedings took place on 2 April 2014 during which the followings aspects, *inter alia*, were discussed:

- Main request: Novelty of the subject-matter of claim 1 over D1 in view of the interpretation of the features "support for coupling to a manipulator means", "circumferential portions" and "sliding panel occupying only the first section".

- Auxiliary request 1: Inventive step of the subject-matter of claim 1 with regard to D1 in view of the feature relating to the entire length of the sliding panel being contained in the first section, when in the retracted position.

- New auxiliary request 2 filed during the oral proceedings: Admissibility of new auxiliary request 2 into the appeal proceedings in view of the replacement of the word "circumferential" by "circular" in claim 1, the addition of the designation "movable" for the motor as well as the disclosure of these features in the description as originally filed.

- New auxiliary request 3 filed during the oral proceedings: Inventive step of the subject-matter of claim 1, in particular with regard to documents D1, D2 and D3 and the general knowledge of the skilled person, D1 being considered to be the closest prior art. Starting from D1, it was discussed whether the skilled person would end up with the claimed solution, i.e. at least one movable motor and movable drive pinions on circumferential racks associated with the circumferential portions of the first section.

The respondent filed an adapted description for the new auxiliary request 3: pages 2 and 3 of the published European patent specification (EP 1 794 072 B1). He withdrew auxiliary requests 2 to 8 filed with the letter dated 20 September 2013.

Late filed document D4 was not admitted in the appeal proceedings.

The present decision was announced at the end of the oral proceedings.

IV. The appellant requests that the decision under appeal be set aside and that the patent be revoked.

V. The respondent requests that the patent be maintained on the basis of the main request(=patent as granted) or of auxiliary request 1 filed with the letter of 20 September 2013, alternatively, of one of the auxiliary requests 2 to 3 filed during the oral proceedings held on 2 April 2014.

VI. The documents of the opposition and appeal proceedings which are mentioned in the present decision are the following:

D1: FR-A-2 427 977
D2: DE-B-1 275 467
D3: EP-A-1 457 442
D4*: DE-A-36 22 477
* cited for the first time in appeal proceedings

VII. The wording of claim 1 of the **main request**(=patent as granted) reads as follows:

"A handling unit (1) for palletizing, characterized by comprising:
- a support (2) for coupling to manipulator means;
- a framework (3) associated with said support (2) and defining an aperture;

- a pair of parallel opposing slide rails (5) fixed to said framework (3);
- at least one flexible sliding panel (7) slidable along said rails (5) between an extended position in which it completely closes said aperture to enable it to support articles to be palletized, and a retracted position in which it opens said aperture to enable said articles to fall through said aperture;
- drive means (18,19) for sliding said panel (7) along said rails (5),

characterized in that said pair of parallel opposing slide rails (5) comprises a first section that extends along two opposing circumferential portions and a second section that extends along two horizontal opposing portions, said sliding panel (7) occupying only the first section extending along the two circumferential portions when in its retracted position."

Claim 1 of the **auxiliary request 1** reads as follows (in bold the amendments with respect to the main request; emphasis added by the Board):

"A handling unit (1) for palletizing, characterized by comprising:
- a support (2) for coupling to manipulator means;
- a framework (3) associated with said support (2) and defining an aperture;
- a pair of parallel opposing slide rails (5) fixed to said framework (3);
- at least one flexible sliding panel (7) slidable along said rails (5) between an extended position in which it completely closes said aperture to enable it to support articles to be palletized, and a retracted position in which it opens said aperture to enable said articles to fall through said aperture;

- drive means (18, 19) for sliding said panel (7) along said rails (5),
characterized in that said pair of parallel opposing slide rails (5) comprises a first section that extends along two opposing circumferential portions and a second section that extends along two horizontal opposing portions, said sliding panel (7) occupying only the first section extending along the two circumferential portions when in its retracted position, **so that the entire length of the sliding panel is contained in the first section in the retracted position.**"

Claim 1 of the **auxiliary request 2** reads as follows (in bold the amendments with respect to the main request; emphasis added by the Board):

"A handling unit (1) for palletizing, characterized by comprising:
- a support (2) for coupling to manipulator means;
- a framework (3) associated with said support (2) and defining an aperture;
- a pair of parallel opposing slide rails (5) fixed to said framework (3);
- at least one flexible sliding panel (7) slidable along said rails (5) between an extended position in which it completely closes said aperture to enable it to support articles to be palletized, and a retracted position in which it opens said aperture to enable said articles to fall through said aperture;
- drive means (18,19) for sliding said panel (7) along said rails (5),
characterized in that said pair of parallel opposing slide rails (5) comprises a first section that extends along two opposing ~~**circumferential**~~ **circular** portions and a second section that extends along two horizontal

opposing portions, said sliding panel (7) occupying only the first section extending along the two ~~**circumferential**~~ **circular** portions when in its retracted position, **wherein said drive means comprise at least one movable motor (18) rotating a first movable drive pinion (19) engaging a first fixed circumferential rack (20) with which one of the opposing circular portions of the first section of the rails (5) is associated**."

Claim 1 of the **auxiliary request 3** reads as follows (in bold the amendments with respect to the main request; emphasis added by the Board):

"A handling unit (1) for palletizing, characterized by comprising:
- a support (2) for coupling to manipulator means;
- a framework (3) associated with said support (2) and defining an aperture;
- a pair of parallel opposing slide rails (5) fixed to said framework (3);
- at least one flexible sliding panel (7) slidable along said rails (5) between an extended position in which it completely closes said aperture to enable it to support articles to be palletized, and a retracted position in which it opens said aperture to enable said articles to fall through said aperture;
- drive means (18.19) for sliding said panel (7) along said rails (5),
~~**characterized in that**~~ **wherein** said pair of parallel opposing slide rails (5) comprises a first section that extends along two opposing circumferential portions and a second section that extends along two horizontal opposing portions, said sliding panel (7) occupying only the first section extending along the two circumferential portions when in its retracted position,

characterized in that said drive means comprise at least one movable motor (18) rotating a first movable drive pinion (19) engaging a first fixed circumferential rack (20) with which one of the opposing circumferential portions of the first section of the rails (5) is associated, and wherein said first drive pinion (19) is axially keyed via a shaft (21) to a second movable pinion (22) engaging a second fixed circumferential rack (23) with which the remaining opposing circumferential portions of the first section of the rails (5) are associated."

VIII. The appellant argued essentially as follows

Main request

Document D1 discloses all features of claim 1 so that its subject-matter is not novel over D1.

In particular, the device of D1 implicitly comprises a support for coupling the framework to manipulator means.

There is no need to consult the description for interpreting the term "circumferential" used in claim 1. This term is broad and means that the two opposing circumferential portions go at least around any curved shape. There is anyway no clear and unambiguous definition for this term in the contested patent and the features of the embodiment, such as rigid arms, cannot limit claim 1. The O-section of the number six-shape of the rails shown in figures 3 and 4 of D1 corresponds to the first section specified in claim 1 and unambiguously fulfils the claimed requirement of being "circumferential".

The term "only" used in claim 1 means that the sliding panel occupies only the first, but not the second section. That it occupies an intermediate section between the first and second sections, as in D1, is not excluded by this term.

Auxiliary request 1

The additional feature over claim 1 of the main request that the entire length of the sliding panel is contained in the first section in the retracted position is also known from D1 when considering the complete spiral portion of D1 as being the first portion defined in claim 1. Thus, the subject-matter of claim 1 of auxiliary request 1 should also be regarded as lacking novelty over D1.

Starting from D1 as closest prior art the only distinguishing feature of claim 1 would be that the entire length of the sliding panel is contained in the first section, when in the retracted position. This solves the problem of making the palletizing unit of D1 more compact. The skilled person using his common general knowledge would, however, come to the claimed solution in an obvious manner as a result of simply executing a design option.

Auxiliary request 2

The replacement in claim 1 of auxiliary request 2 of "two opposing circumferential portions" by "two opposing circular portions" was made for the first time in appeal, at the oral proceedings. It leads *prima facie* to a valid objection of added subject-matter, which has never been raised and discussed so far in the opposition/appeal proceedings. For reason of procedural

economy, this auxiliary request should not be admitted in the proceedings.

Auxiliary request 3

D4 should be admitted in the proceedings since it shows that pinion and rack systems for setting up drive means in palletizing units belong to the common general knowledge in this field. Further, D4 was filed as a reaction to the respondent's new auxiliary requests.

Starting from D1 as closest prior art, the specific drive means comprising *inter alia* a movable motor, movable drive pinions and fixed circumferential racks, are the only distinguishing feature. Faced with the problem of providing the palletizing unit of D1 with appropriate drive means, the skilled person would look for combinable solutions, meaning only pinion and rack systems. Since there exist only pinion and rack systems with either fixed or movable drive pinion/motor the skilled person would arrive at the claimed solution in an obvious manner. This is all the more true since a system with a fixed drive pinion/motor would be too complicated to adapt and implement in the palletizing unit of D1 due to the spiral shape of the rails.

IX. The respondent argued essentially as follows

Main request

The table or framework in the palletizing unit of D1 is not suitable for being coupled to manipulator means. Further, D1 does not disclose manipulator means according to the meaning of the contested patent, i.e. a portal crane or a robot. Therefore, a support for

coupling to manipulator means is disclosed neither explicitly nor implicitly by D1.

The two opposing circumferential portions of the first section in claim 1 should be interpreted in view of the contested patent as being strictly circular; this is not disclosed in D1. Further, an intermediate section between the circumferential section and the horizontal second section like in the device of D1 is excluded from claim 1.

The term "only" means that the sliding panel is entirely within the first section when retracted, i.e. it does not occupy any other section like the intermediate section in the device of D1.

Therefore, the subject-matter of claim 1 is to be regarded as being novel over D1.

Auxiliary request 1

D1 does not disclose that the entire length of the sliding panel is contained in the first section when in the retracted position since it also occupies an intermediate section between the first and the horizontal second sections. Novelty should therefore be recognized.

The distinguishing feature of claim 1 over D1 that the entire length of the sliding panel is contained in the first section leads to solving the problem of providing a more compact and less complex highly versatile palletizing unit. Faced with this problem, the skilled person would not come to the claimed solution in view of D1 alone.

Auxiliary request 2

The replacement in claim 1 of "two opposing circumferential portions" by "two opposing circular portions" has a clear basis in the application as originally filed so that the request does not lead *prima facie* to new objection(s) never discussed before and, hence, auxiliary request 2 should be admitted in the proceedings.

Auxiliary request 3

Late filed document D4 could already have been filed in the opposition proceedings since the features introduced in claim 1 of auxiliary request 3 originate from claims 5 and 6 as granted. D4 is furthermore *prima facie* not relevant. Therefore, it should not be admitted in the proceedings.

The drive means specified in claim 1 are not disclosed in any of the available documents. Starting from D1 as closest prior art, the skilled person faced with the problem of finding appropriate drive means for the sliding panel in the device of D1 would be left with a selection to be performed among a large number of available solutions, each of which would have to be adapted and implemented. He would therefore not come up with the claimed solution in an obvious manner.

Reasons for the Decision

1. Main request

1.1 The feature designation of claim 1 is the following:

A handling unit (1) for palletizing, comprising
a) a support (2) for coupling to manipulator means;
b) a framework (3) associated with said support (2) and defining an aperture;
c) a pair of parallel opposing slide rails (5) fixed to said framework (3);
d) at least one flexible sliding panel (5) slidable along said rails (5) between an extended position in which it completely closes said aperture to enable it to support articles to be palletized, and a retracted position in which it opens said aperture to enable said articles to fall through said aperture;
e) drive means (18,19) for sliding said panel (7) along said rails (5),
f) said pair of parallel opposing slide rails (5) comprising a first section that extends along two opposing circumferential portions
g) and a second section that extends along two horizontal opposing portions,
h) said sliding panel (7) occupying only the first section extending along the two circumferential portions when in its retracted position.

1.2 The main request corresponds to the set of claims in accordance with the text approved by the respondent for the grant of the patent on 15 February 2008 (Druckexemplar). The requested amendment of "pai**n**" to "pai**r**" is in fact a request to correct a printing error since "pair" appears in the Druckexemplar. The main

request corresponds therefore to the patent as actually granted.

1.3 Novelty (Article 54(1) EPC)

The appellant raises a lack of novelty objection with D1 against the subject-matter of claim 1 of the main request.

1.3.1 D1 discloses a handling unit for palletizing, comprising:
- a support for coupling to manipulator means;
- a framework ("guides" (20); "table" (2); "plaques" (23)) associated with said support and defining an aperture located above conveying rollers (4);
- a pair of parallel opposing slide rails (20) fixed to said framework (2, 20, 23);
- at least one flexible sliding panel ("plaque de guidage"; "rouleaux parallèles" (21)) slidable along said rails (20) between an extended position in which it completely closes said aperture to enable it to support articles (A) to be palletized, and a retracted position in which it opens said aperture to enable said articles (A) to fall through said aperture;
- drive means, which are known as such and acting for instance on the very first sliding roller (21) ("mécanisme connu en soi et agissant, par exemple, sur le premier rouleau d'extrémité 21", page 2, lines 20-22) for sliding said panel (21) along said rails (20);
- said pair of parallel opposing slide rails (20) comprising a first section that extends along two opposing circumferential portions ("profil courbe sensiblement en spirale"; the end point of this spiral as shown in figures 3 and 4) and a second section that

extends along two horizontal opposing portions above conveying rollers (4). Said sliding panel (21) occupies only the first section (i.e. not the second section, but possibly an intermediate section) extending along the two circumferential portions when in its retracted position (page 1, line 36 to page 2, line 42; page 3, lines 1-22; page 3, lines 33 to page 4, line 9; claims 1, 4; figures).

Consequently, all features of claim 1 are known from D1 and, hence, its subject-matter is not novel over D1 (Article 54(1) EPC).

1.3.2 Support for coupling to manipulator means (feature a))

The respondent considers that feature a) is not disclosed in D1, rendering the claimed subject-matter novel.

The Board concurs with the parties that feature a) is indeed not explicitly disclosed in D1. However, as argued by the appellant, it appears, page 2, lines 7-11, that the rails (20), the plates (23) and the table (2), which are assembled together, are vertically movable. The passage of D1, page 4, third paragraph, which defines the available height in order to house the spiral shape of the rail which receives the sliding panel in its retracted position, does not imply that the table or the framework is fixed in D1. Therefore, contrary to the respondent's view, the whole framework (2, 20, 23) of D1, i.e. including the table, is to be seen as suitable for being coupled to manipulator means.

Consequently, the Board is of the opinion that the device of D1 implicitly comprises a support for

coupling the framework ("guides" (20); "table" (2); "plaques" (23)) to the manipulator means, which moves it vertically (see also impugned decision, point 9, last paragraph).

The fact that D1 does not disclose a manipulator means according to the meaning of the contested patent, i.e. a portal crane or a robot, as argued by the respondent, does not play a role since the manipulator means is not part of claim 1.

Furthermore, the support of claim 1 has only to be "suitable for" being coupled to any kind of manipulator means, which latter is in any case not specified. Since the framework of the handling unit of D1 is vertically movable, it inevitably comprises a support suitable for being coupled to **a** manipulator means.

Feature a) is therefore regarded as being implicitly disclosed by D1.

Finally, it is pointed out that contrary to the respondent's view as submitted in writing, the rails (20) are regarded as belonging to the framework ("guides" (20); "table" (2); "plaques" (23)) of D1, which then defines an aperture in accordance with claim 1.

1.3.3 Interpretation of "two opposing circumferential portions" (feature f))

For the respondent the two opposing circumferential portions of the first section in claim 1 should be interpreted as being **strictly circular** in view of the contested patent. It argues that the contested patent is to be seen as its own dictionary for defining the

terms of the claims. As the problem to be solved set out in the application as originally filed, page 12, lines 11-14, of reducing complexity and increasing compactness of a highly versatile handling unit can only be solved by having a circular shape, this feature of claim 1 can only be interpreted as "strictly circular". Any other shape would not solve the problem. This is all the more true since the contested patent explicitly mentions that the first section extending along the circumferential portions is **coaxial** to a pair of **circular** protection walls (cf. paragraph [0014] of the contested patent). Since D1 discloses a spiral shape, i.e. not strictly circular, feature f) should be regarded as a distinguishing feature.

Contrary to the respondent's view and as put forward during the oral proceedings, the Board considers that claim 1 is clear in itself and, hence, should not need to be interpreted in the light of the description. The term "circumferential" is simply to be seen in its broad dictionary sense, namely that the two opposing circumferential portions in claim 1 go at least **around a curved shape**.

In addition, the contested patent does not provide any clear and unambiguous definition for this term, even when considering the problem as alleged by the respondent. Indeed, it does not appear clearly why curved shapes different from a "circular" shape would not solve the alleged problem. Furthermore, the cited passage of the contested patent, paragraph [0014], concerns a specific embodiment shown in the figures which cannot be the basis for limiting the broad term of claim 1. As put forward during the oral proceedings, the circumferential portions are defined as being "circular" only in dependent claim 7 of the patent as

granted, implying *a contrario* that the circumferential portions of claim 1 need not be circular.

As noted by the respondent, the application as originally filed, page 4, line 15 onwards, specifies indeed that the disclosed drive means is according to the invention, i.e. with rigid arms (24). As a matter of fact, combined with these features, the "circumferential portion" would have to be circular (see figures 1, 2 and 4a). However, the disclosed drive means is not present in claim 1 and, in addition, this passage in the contested patent is mentioned as "a preferred embodiment", [0024]. Therefore, contrary to the respondent's view, neither the disclosed drive means implies that the circumferential portions of claim 1 have to be strictly circular.

As further discussed during the oral proceedings, the Board considers that the spiral shape of the rails receiving the sliding panel in its retracted position as shown in figure 3 of D1 exhibits a "number six-shape" to be split into two sections: a O-section and an intermediate section, the latter linking the O-section and the second section of the rails extending horizontally. For the Board, the O-section of the number six-shape shown in figures 3 and 4 of D1 corresponds to the first section of the rails specified in claim 1 and unambiguously fulfils the claimed requirement of being "circumferential".

The Board also shares the appellant's view which was contested by the respondent that claim 1 does not exclude an intermediate section as in D1, due to the mention of "comprises" for defining the number of sections of the slide rails.

In view of the above, D1 also discloses feature f).

It is noted, however, that the Board does not follow the appellant's view that the complete six-shape of D1, i.e. the O and the intermediate sections together - would correspond to the first circumferential section according to claim 1.

1.3.4 Interpretation of "sliding panel occupying only the first section" (feature h))

The respondent is of the opinion that the term "only" should be regarded as meaning that the sliding panel is **entirely within the first section** when retracted, i.e. it does not occupy any other section. Since the sliding panel in D1 also occupies an intermediate section when retracted (see figure 3), feature h) should be regarded as a distinguishing feature over D1.

As put forward during the oral proceedings, the Board does not share the respondent's view since it interprets the term "only" in the light of the distinction between "first" and "second" section of claim 1, meaning: the sliding panel occupies only the first, **but not the second section**. That it occupies an intermediate section between the first and second sections, as in D1, is not excluded by the term "only" as used in claim 1. Therefore, feature h) is also regarded as being disclosed by D1.

2. Auxiliary request 1

2.1 Amendments (Articles 123(2), (3) EPC)

2.1.1 With respect to claim 1 of the main request, claim 1 of auxiliary request 1 further comprises the following additional feature:

i) the entire length of the sliding panel is contained in the first section in the retracted position

2.1.2 This amendment is based on figure 2 of the application as originally filed and limits the scope of claim 1 of the patent as granted.

Since the appellant has not raised any objection with respect to Articles 123(2) and (3) EPC and the Board considers that the subject-matter of independent claim 1 of auxiliary request 1 lacks an inventive step as discussed below, there is no need to discuss whether the requirements of these articles are actually fulfilled by auxiliary request 1.

2.2 Novelty (Article 54(1) EPC)

The appellant raises a lack of novelty objection of the subject-matter of claim 1 of the auxiliary request 1 over D1.

2.2.1 It considers that feature i) is also disclosed by D1 arguing that the complete number six-shape of the rails receiving the sliding panel in its retracted position in D1, i.e. the O and intermediate sections - should be seen as corresponding to the first section according to claim 1. Therefore, in view of the disclosure of D1 discussed under point 1.3 above vis-à-vis claim 1 of the main request, the subject-matter of claim 1 of the auxiliary request 1 would also be lacking novelty.

2.2.2 The Board can, however, not follow the appellant's view since, as already mentioned under point 1.3.3 above, it considers that only the O-section of the number six-shape disclosed in D1 corresponds to the first section according to claim 1. Since the sliding panel in its retracted position also occupies the intermediate section of the number six-shape as shown in figure 3 of D1, the entire length of the sliding panel is **not** contained in the first section in the retracted position. Feature i) is thus a distinguishing feature over D1.

Consequently, novelty of the subject-matter of claim 1 of the auxiliary request 1 is acknowledged on the basis of feature i) (Article 54(1) EPC).

2.3 Inventive step (Article 56 EPC)

The appellant raises a lack of inventive step objection against the subject-matter of claim 1 of the auxiliary request 1 in view of D1 alone.

2.3.1 The Board concurs with the parties that D1 can be regarded as the closest prior art since it is in the same technical field as the contested patent of palletizing units with the same purpose of reducing their required space (D1, page 1, third paragraph; page 3, last two paragraphs; page 4, second and third paragraphs; contested patent, paragraphs [0059] and [0065]).

2.3.2 As discussed under point 2.2 above, feature i) is the only distinguishing feature of claim 1 over D1.

2.3.3 The Board shares the respondent's view that the technical effect of the distinguishing feature can be

seen as to reduce the space requirements of the rails section housing the sliding panel in its retracted position (contested patent, [0059], [0065]). An intermediate section as in D1 is indeed not needed.

The Board does not share, however, the respondent's view regarding a further technical effect of rendering the handling unit less complex. The respondent's arguments that the spiral shape of D1 requires a more complex rolling system for the sliding panel to slide in comparison with a "circular" shape does not hold since such a circular shape is not specified in claim 1 of auxiliary request 1. Indeed, the opposing portions in the first section of the claimed device need not be circular for the reasons already given under point 1.3.3 above.

The further technical effect alleged by the respondent of a more versatile handling unit does not hold either. There is indeed no indication in the contested patent relating feature i) to such an alleged effect.

2.3.4 The last two alleged technical effects are therefore not taken into account for deriving the problem to be solved which is seen as to modify the palletizing unit of D1 in order to make it more compact.

2.3.5 The Board considers, as argued by the appellant, that the skilled person faced with the said problem related to space required for the rails, as also described in D1 (page 1, third paragraph; page 3, last two paragraphs; page 4, second and third paragraphs), would as a matter of design option immediately come to the solution of connecting the O-section directly to the second section, i.e. removing the intermediate section of the number six-shape of D1 and gaining therewith

space vertically and/or horizontally, and adapt the circumference of the remaining O-section in relation to the complete length of the sliding panel in order to fully open the aperture and let the articles drop through, arriving thus at the claimed subject-matter in an obvious manner (Article 56 EPC).

2.3.6 The respondent argues that this can only be *ex post* analysis since there is no suggestion in D1 to firstly dismount the number six-shape of the rails receiving the sliding panel in its retracted position and secondly introduce a new shape in accordance with the claimed solution.

As put forward during the oral proceedings, the board is, however, of the opinion that the skilled person is by himself motivated to find solutions, which need not be disclosed or hinted at in the closest prior art. He can in this respect use his common general knowledge or common design sense. In the present case, although contested by the respondent, the Board considers that the relationships between, on one hand, the local radii of circumferential shapes and, on the other hand, the overall length of circumferential shapes belong to the common general knowledge of the skilled person, so that he will know how to design the shape of the rails in order to completely receive the sliding panel in its retracted position. He would then apply this knowledge for adapting the shape of the O-section after having removed the intermediate section in view of solving the problem to reduce space requirements.

3. Auxiliary request 2

The appellant has contested the admissibility in the proceedings of auxiliary request 2.

3.1 Auxiliary request 2 was filed during the oral proceedings, i.e. very late in the proceedings and, hence, its admissibility is subject to the discretionary power of the Board in accordance with Article 13(1) RPBA.

The Board considers that it would be **contrary to procedural economy** to deal with such a request when the newly introduced amendments were to lead to new objection(s) which were never raised nor discussed so far in the opposition/appeal proceedings. Consequently, it appears necessary to assess whether the amendments lead to *prima facie* new valid objection(s).

3.2 Claim 1 of auxiliary request 2 comprises, among other amendments over claim 1 of the main request, the replacement of "two opposing **circumferential** portions" by "two opposing **circular** portions", now for the first time in the opposition/appeal proceedings.

The respondent considers that there is a clear basis for this amendment in the application as originally filed: page 3, lines 6-8, page 4, line 15 to page 5, line 2, page 5, lines 5-8 and figures 1 and 2 (contested patent: paragraphs [0014], [0024], [0025] and [0027] and figures 1 and 2). It holds the view that the circular portions are explicitly disclosed therein and further confirmed by the terms "coaxial" and "rotating" which can only mean circular.

The Board can, however, not share the respondent's view for the reasons put forward by the appellant that there is **no basis of a general disclosure** in the application as originally filed for the portions of the first section to be "circular". The cited passages relate to

the "best mode for carrying out the invention", i.e. a specific preferred embodiment shown in figures 1 and 2 (cf. also page 1, line 23 to page 2, line 4; original claim 8).

As a matter of fact, the terms "circular", "coaxial" or "rotating" are always disclosed in structural and functional combination with other features of an embodiment, such as "a pair of circular protection wall 6" and/or "rigid arms 24", said other features being, however, not included in claim 1 of auxiliary request 2. The feature "circular" for the opposing portions has thus been isolated from a combination of features structurally and functionally linked to each other. As a result, claim 1 of auxiliary request 2 covers embodiments which were not foreseen in the application as originally filed, for instance that the pinions are maintained engaged with the circumferential racks of the first section by other means than rigid arms. In view of the above, the amendment leads *prima facie* to an inadmissible intermediate generalisation contrary to Article 123(2) EPC, which has never been raised and discussed so far in the opposition/appeal proceedings.

Consequently, the Board decides not to admit auxiliary request 2 in the proceedings (Article 13(1) EPC).

4. Auxiliary request 3

4.1 Admissibility in the proceedings

The appellant has **not** contested the admissibility in the proceedings of auxiliary request 3.

This request was filed during the oral proceedings before the Board, however with no substantive amendment

with respect to auxiliary request 4 filed with the letter dated 20 September 2013. Only the two-part form of claim 1 was adapted in view of the discussion of the disclosure of D1 for the previous requests. This former auxiliary request 4 had been acceptably filed in reaction to the preliminary non-binding opinion of the Board, which was contrary to the outcome of the opposition proceedings.

As discussed below, this request does not lead to *prima facie* new valid objection(s) and, furthermore, overcomes the previous objection of lack of inventive step against claim 1 of auxiliary request 1.

Therefore, the Board does not see any reason not to admit auxiliary request 3 in the proceedings.

4.2 Amendments (Articles 123(2), (3) EPC)

4.2.1 With respect to claim 1 of the main request, claim 1 of auxiliary request 3 comprises the following additional features:

j) said drive means comprise at least one movable motor (18) rotating a first movable drive pinion (19) engaging a first fixed circumferential rack (20) with which one of the opposing circumferential portions of the first section of the rails (5) is associated, and
said first drive pinion (19) is axially keyed via a shaft (21) to a second movable pinion (22) engaging a second fixed circumferential rack (23) with which the remaining opposing circumferential portions of the first section of the rails (5) are associated

4.2.2 Claim 1 of auxiliary request 3 is based on claims 1, 5 and 6 of the patent as granted (original claims 1, 2, 6 and 7) so that the requirements of Articles 123(2) and (3) EPC are fulfilled. This has not been contested by the appellant.

4.3 Novelty (Article 54(1) EPC)

As features j) are not disclosed in any of the available documents, novelty of the claimed subject-matter is acknowledged. This also has not been contested by the appellant.

4.4 Inventive step (Article 56 EPC)

The appellant raises a lack of inventive step objection on the subject-matter of claim 1 of auxiliary request 3 in view of D1 and the common general knowledge of the skilled person.

4.4.1 The Board concurs with the parties that D1 can still be taken as the closest prior art document for the reasons already given under point 2.3.1 above.

4.4.2 The appellant requests to admit **document D4** in the proceedings in order to support its view that pinions and racks for setting up drive means are known in the same technical field as that of the contested patent of palletizing units and moreover belong to the common general knowledge (column 6, line 56 to column 7, line 8; "Ritzel" and "Zahnstangen"). It argues that D4 was filed as a reaction to the respondent's new auxiliary requests.

The Board cannot share the appellant's view since, as put forward by the respondent, D4 is late filed and

could have been filed earlier in the proceedings than January 2014 since the fourth auxiliary request on which auxiliary request 3 is based was filed with letter of 20 September 2013. For this reason already, D4 is not admitted in the proceedings (Article 12(4) EPC).

Furthermore, the Board does not need D4 to admit that pinions and racks belong to the common general knowledge of the skilled person for setting up drive means in the technical field of the contested patent. As admitted by the appellant, D4 does not disclose a specific pinion and rack system and remains silent on whether the pinion or the rack is fixed or movable. Since the appellant does not intend to use D4 other than for this already accepted common general knowledge, the Board considers that D4 is not *prima facie* relevant and, hence, does not admit it in the proceedings for this reason as well (Article 13(1) RPBA).

4.4.3 D1 merely refers, in a general manner, to the known mechanisms for sliding the panel (page 2, end of second paragraph, "au moyen d'un mécanisme connu en soi"). Therefore, the Board shares the appellant's view that features j) are the distinguishing features over D1.

4.4.4 The technical effect of these features is to enable the sliding panel to slide.

4.4.5 The problem to be solved is therefore to provide the palletizing unit of D1 with appropriate drive means for the sliding panel.

4.4.6 The appellant argues that the skilled person will look for a solution combinable with the palletizing unit of

D1. By doing so, he would not consider the solutions disclosed in D2 (system with a drum; column 3 line 11 to column 4, line 8 and figures 1 and 2) or D3 (system with drive chains; [0028]-[0035] and figure 1) as they are not adaptable to the palletizing unit of D1. Therefore, for him would only remain the possibility of a pinion and rack system which comprises only two types: either a fixed or a movable drive pinion/motor. Since this amounts to a selection within a short list, each of the solutions being known and usual, no inventive step can be recognized when selecting a movable drive pinion/motor.

In addition, a fixed drive pinion/motor would be too complicated to adapt in the palletizing unit of D1 in view of the spiral shape of the rails receiving the sliding panel in its retracted position. Therefore, the skilled person would immediately come up with the claimed solution of a movable drive pinion/motor. For feasibility reasons, he would indeed need a second movable drive pinion, so that he would arrive at the claimed subject-matter in an obvious manner.

4.4.7 The Board does not share the appellant's view for the reasons put forward by the respondent during oral proceedings. The skilled person faced with the above problem of finding appropriate drive means for the sliding panel in the device of D1 would be left with a selection to be performed among a large number of available solutions, including drum systems as in D2, drive chain systems as in D3, or pinion and rack systems as common general knowledge. However, for the choice of the particular solution of a movable pinion, together with its motor, to engage the rack fixed along the circumferential section, with a connected second pinion engaging a second fixed rack on the other

opposing circumferential portion, there is more required, such as more concrete suggestions in the prior art, than general technical skills. Consequently, the Board is of the opinion that the skilled person would not come up in an obvious manner with the claimed solution so that the subject-matter of claim 1 of auxiliary request 3 involves inventive step (Article 56 EPC).

5. Version of the patent to be maintained

The Board has taken note of the Notice from the EPO of 8 November 2013 (cf. OJ EPO 2013, 603) regarding the practice on handwritten amendments to patent documents. From the accompanying information it is clear that this applies as from 1 January 2014 to **first instance** proceedings, see http://www.epo.org/service-support/faq/procedure-law/amendments.html.

This practice requires that handwritten amendments can be filed during oral proceedings, but for finalising the decision they should be filed there and then in typed printed form of the patent documents, or that a time limit should be set to file the amendments in such form. Both procedures require a check by the competent department that nothing more has been amended than what was allowed and giving the other party/parties the possibility to check and comment, before a decision can be issued.

The documents as proposed for the maintenance of the patent according to auxiliary request 3 contain handwritten amendments, carried out at the oral proceedings. For the Board to do what is required by the above Notice would, in the present case, be detrimental to the principles of due process and

procedural economy, according to which the Boards are required to deal with and decide on cases expediently.

The Board therefore finds that the documents as presented at the oral proceedings, for which the above checks could easily be performed and to which the appellant has had the opportunity to comment, are sufficient to base its (final) decision on.

Since the department of first instance in any case will have to perform further formal steps before it actually maintains the patent in accordance with the Board's order, it can apply its new practice to the present documents.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the department of first instance with the order to maintain the patent on the basis of:

   Claims:
   No. 1 to 21 of the new auxiliary request 3 as filed during the oral proceedings.
   Description:
   Pages 2 and 3 of the published patent as filed during the oral proceedings;
   Pages 4 and 5 of the published patent as granted.
   Drawings:
   Figures 1 to 10 of the published patent as granted.

The Registrar: The Chairman:

G. Nachtigall H. Meinders

Decision electronically authenticated