

Internal distribution code:

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

**Datasheet for the decision
of 9 October 2019**

Case Number: T 1589/15 - 3.2.07

Application Number: 07700153.5

Publication Number: 1971541

IPC: B65G47/68, B65G47/91

Language of the proceedings: EN

Title of invention:

METHOD AND A SYSTEM FOR TRANSFERRING OF ITEMS

Patent Proprietor:

Scanvaegt International A/S

Opponent:

Nordischer Maschinenbau
Rud. Baader GmbH + Co. KG

Headword:

Relevant legal provisions:

EPC Art. 56
RPBA Art. 12(4), 13(1), 13(3), 15(1), 15(6)

Keyword:

Inventive step - (yes)

Late-filed line of attack - admitted (no)

Decisions cited:

Catchword:



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 1589/15 - 3.2.07

D E C I S I O N
of Technical Board of Appeal 3.2.07
of 9 October 2019

Appellant:

(Opponent)

Nordischer Maschinenbau
Rud. Baader GmbH + Co. KG
Geniner Strasse 249
23560 Lübeck (DE)

Representative:

Stork Bamberger Patentanwälte PartmbB
Meiendorfer Strasse 89
22145 Hamburg (DE)

Respondent:

(Patent Proprietor)

Scanvaegt International A/S
P.O. Pedersens Vej 18
8200 Arhus N (DK)

Representative:

Patentgruppen A/S
Aaboulevarden 31, 4
8000 Aarhus C (DK)

Decision under appeal:

**Decision of the Opposition Division of the
European Patent Office posted on 5 June 2015
rejecting the opposition filed against European
patent No. 1971541 pursuant to Article 101(2)
EPC.**

Composition of the Board:

Chairman

I. Beckedorf

Members:

A. Pieracci

K. Poalas

Summary of Facts and Submissions

- I. The opponent lodged an appeal in the prescribed form and within the prescribed time limit against the decision of the opposition division rejecting the opposition against European patent No. 1 971 541
- II. The opposition has been filed against the patent as a whole based on Article 100(a) EPC (lack of inventive step). The opposition division considered the above-mentioned ground of opposition not to be prejudicial to the maintenance of the patent as granted.
- III. With the statement setting out the grounds of appeal the appellant (opponent) requested
- that the decision under appeal be set aside and that the patent be revoked or, in the alternative, that the case be remitted to the opposition division if the Board foresaw finding against the appellant based on subject-matter not being the object of the impugned decision.
- IV. The respondent (patent proprietor) requested
- that the appeal be dismissed, *i.e.* that the patent be maintained as granted, or, in the alternative, if the decision under appeal is set aside, that the patent be maintained in amended form on the basis of the claims of auxiliary requests 1 to 6 filed with the reply to the grounds of appeal which correspond to the claims of auxiliary requests 1 to 6 filed in the opposition proceedings,

and
that documents E6 to E8, filed by the appellant during opposition proceedings with the letter dated 6 May 2015, and documents E9 and E10, filed with the grounds of appeal, not be admitted in the appeal proceedings.

V. In the present decision, reference is made to the following documents:

E1: WO 2005/062994 A2

E2: DE 697 20 078 T2

VI. Oral proceedings before the Board took place on 9 October 2019, to which both parties had been duly summoned and in preparation for which the Board had issued a communication pursuant to Article 15(1) RPBA setting out its preliminary opinion on the appeal case. In this communication, the Board indicated that the subject-matter of claim 1 appeared to be inventive in view of the teaching of documents E1 and E2 and that it foresaw not to admit documents E6 to E10 into the proceedings. For further details on the course of the oral proceedings, in particular the matters discussed with the appellant, reference is made to the minutes. The order of the decision was given at the end of the oral proceedings.

VII. The lines of arguments of the parties are substantially as follows, and they are dealt with in detail in the reasons for the decision.

The appellant argued that document E1 disclosed elements disposed in an unordered form as well as a

plurality of gripping carriers, each carrying a plurality of gripping means. It also argued that document E2 showed transport means forming part of a transport loop. The appellant reasoned that the subject-matter of claim 1 and 8 was not inventive starting from either document E1 or E2 in combination with the teaching of the other document. The appellant also submitted at the oral proceedings a new line of attack based on document E1 in combination with the common general knowledge of the person skilled in the art.

The respondent argued that the person skilled in the art would have had no reason to introduce a transport loop in E1 and a plurality of gripping carriers in E2 and that accordingly the subject-matter of claim 1 and 8 is based on an inventive step. The appellant also objected to the admittance of the appellant's line of attack presented for the first time at the oral proceedings.

VIII. Independent claim 1 of the patent as granted reads:

Method of transferring items (2) from a first area to a second area, from which the items are transferred in an orderly flow of items,

- whereby a plurality of gripping means (18) are used for transferring said items and
- whereby said method comprises the steps of
- moving at least one of said plurality of gripping means (18) towards at least part of said first area or vice versa,
- engaging one of said items among said items at said first area by said at least one of said plurality of gripping means (18),

- moving said engaged item away from said first area, or vice versa,
- placing said engaged item at a selected position, and whereby
- said item is moved away from said second area in an orderly flow with at least one further item handled by another of said plurality of gripping means,

characterized in that

said items are provided at said first area in an unorderedly form, a plurality of gripping carriers (16) are used for transferring said items, each of said plurality of gripping carriers (16) carrying at least one of said plurality of gripping means (18), said plurality of gripping carriers (16) being controlled in such a manner that they are independently movable, and whereby said items are being moved at said first area by transport means forming part of a transport loop.

IX. Independent claim 8 of the patent as granted reads:

System for transferring items (2) from a first area to a second area, said system being adapted for transferring an orderly flow of items from said second area, said system comprising

- a plurality of gripping means (18) adapted for transferring said items,
- first location means for supporting items at said first area and
- second location means for supporting items at said second area, wherein the system is adapted for
 - moving at least one of said plurality of gripping means (18) towards at least part of said first area or vice versa,
 - engaging one of said items among said items at said first area by said at least one of said plurality of gripping means (18),

- moving said engaged item away from said first area, or vice versa,
- placing said engaged item at a selected position, and whereby
- said item is moved away from said second area in an orderly flow with at least one further item handled by another of said plurality of gripping means,

characterized in that

said items are provided at said first area in an unorderly form, the system further comprises a plurality of gripping carriers (16), each carrying at least one of said plurality of gripping means (18), said plurality of gripping carriers (16) being independently controllable, and wherein said first location means is part of transport means forming part of a transport loop.

Reasons for the Decision

1. Admittance into the proceedings of the line of attack based on E1 in combination with the common general knowledge
 - 1.1 The appellant argues for the first time at the oral proceedings against the inventive step of the claimed subject-matter on the basis of the teaching of document E1 in combination with the common general technical knowledge of the person skilled in the art. The respondent objects to the admittance of this new line of attack into the proceedings as being filed late and not clearly *prima facie* relevant.
 - 1.2 The appellant argues that the amendment of its case is justified owing to the change of the professional

representative after the retirement of the representative previously responsible for the present case and the *prima facie* relevance of the new objection. However, this is not convincing and the Board does not exercise its discretion to admit the new submission in accordance with Articles 12(4), 13(1) and (3) RPBA.

The objection could and should have been raised together with the statement of the grounds of appeal. Furthermore, since it relates to the claims of the patent as granted, it should have been raised at the outset of the opposition proceedings with the notice of opposition. The appellant did not react in writing to the Board's negative preliminary opinion pursuant to Article 15(1) RPBA which had been issued seven months before the date of oral proceedings.

The course of action taken by the appellant is inappropriate since it prevented the Board and the respondent from having sufficient time to deal with the newly submitted objection of lack of inventive step. It is thus contrary to the principle of procedural economy. The submission of the new line of attack at this late stage of the proceedings does not take into account the state of the proceedings and the fact that its effect on the oral proceedings is not limited to a potential surprise or to an undue burden put on the other party or the Board. Given that this new line of attack would constitute a previously unargued case, the oral proceedings would need to be adjourned rather than closed with a final decision, contrary to Article 15(6) RPBA. Furthermore, the reasons provided by the appellant for this course of action do not appear to represent circumstances which could warrant a different assessment of the case.

The Board therefore exercises its discretion to not admit the newly raised inventive step objection into the proceedings according to Articles 12(4), 13(1) and (3) RPBA.

2. Inventive step of the subject-matter of claim 8 (Articles 100(a) and 56 EPC)

2.1 The appellant argues as follows.

2.1.1 In the written proceedings, the appellant argues that contrary to the decision of the opposition division (see the third paragraph of point 7.4 of reasons of the impugned decision), document E2 also discloses the feature M13:

"...first location means which are part of transport means forming part of a transport loop...",

since in E2 the recirculating conveyor (12) with endless belts (12B) and deflector (11) constitutes a transport loop for recirculating items which are not taken by the pick-up means (18).

The appellant further argues that the distinguishing feature M13 and the combination of distinguishing features M11 and M12 solve over the disclosure of E2 two different partial problems without any synergistic effect.

The distinguishing feature M13 solves the partial problem of simplifying the handling of items which are not taken by the grippers. This first partial problem is solved by document E2, which shows with recirculating conveyor (12) endless belts (12B) and

deflector (11) a transport loop corresponding to the claimed solution.

The combination of the distinguishing features M11 and M12, which is that

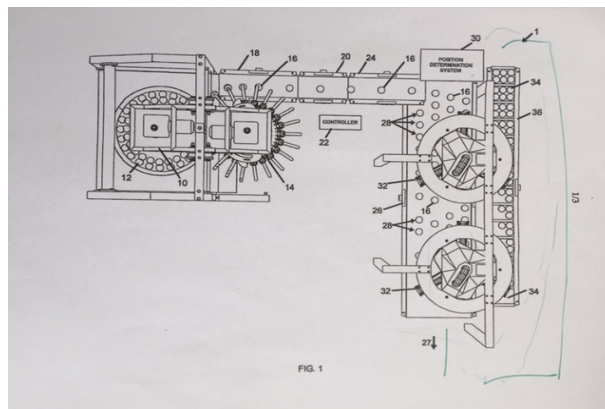
"...the system further comprises a plurality of gripping carriers, each carrying at least one of said plurality of gripping means, said plurality of gripping carriers being independently controllable...",

solves the partial problem of increasing the capacity and flexibility of the system for transferring the items from an unordered area to an orderly one. The solution to this second partial problem is known from document E1, as also agreed by the contested decision (see point 7.5, fourth paragraph of the reasons of the impugned decision).

The appellant argues that documents E1 and E2 are equally relevant and that each shows the solution of one of the two partial problems. Thus, when starting from E2, the subject-matter of claim 8 is not inventive in view of the combination with the teaching of E1 and vice versa.

- 2.1.2 At the oral proceedings the appellant further argues that the person skilled in the art starting from E1 would have inserted into the system depicted in figure 1 of E1 the transport loop, *i.e.* the recirculating conveyor (12), of figure 1 of E2. This would have allowed reintroducing into the system the items not collected by the gripping means that would have otherwise fallen on the floor at the end of population conveyor (26) (see figure 1 of E1).

The person skilled in the art would thus have located the transport loop (12) of E2 at the lower end of the population conveyor (26) to go around the population conveyor (26) and the takeaway conveyor (36) and thus to reintroduce missed items (16) at the beginning of the population conveyor (26), thereby arriving at a system according to the subject-matter of claim 8 (see the hand-drafted line at the right-hand side of figure below, which represents the insertion of the transport loop in the system of document E1 as argued by the appellant at the oral proceedings).



The appellant also argues that the person skilled in the art starting from E2 and facing the problem of increasing the capacity and flexibility of the system would have been induced by the teaching of E1 to introduce a plurality of gripping carriers into the system of E2.

All the needed structural modifications of the system of E2 would have been within the capability of the person skilled in the art without the need of exercising any inventive skill.

The person skilled in the art would, for example, have introduced a plurality of smaller gripping carriers in case of a lack of space for their installation.

2.2 The respondent argues as follows.

2.2.1 In the written proceedings, the respondent argues that in document E1 the items (16) are placed on the population conveyor (26) in an orderly form by an extend-retract conveyor (24) so that also feature M10, which is that

"...said items are provided at said first area in an unorderly form...",

is not disclosed in E1, contrary to the decision of the opposition division.

The respondent also argues that the combination of a recirculating conveyor (12), of the endless belts (12B) and of the curved reflector (11) shown in E2 does not constitute a transport loop in combination with the first location means as according to feature M13.

The respondent further argues that the features "transport loop for recirculation" (M13) and "controllable gripping and transferring" (M11+M12) are not just a juxtaposition or aggregation of features but a "true combination of features", providing a synergistic effect.

The recirculation of items renders not compelling the pick-up of an item on the first or subsequent run. Thus, accurate control of the gripping carriers with gripping means is also not compelling. It is thereby achieved that there will always be sufficient items in front of the gripping means, so that the picking up of these items is efficient. The combined technical effect achieved is therefore greater than the technical effect of the individual features.

2.2.2 At the oral proceedings the respondent further argues that the person skilled in the art would not have introduced a transfer loop apparently known from document E2 into the system of document E1, since the reintroduction into the transfer system of document E1 of the items would interfere with the measurement device (20) and the controller (22) which identify and control the picking up of such items.

The respondent also argues that the person skilled in the art starting from document E2 would have received no incentive from document E1 to increase the number of gripping carriers.

The person skilled in the art would have focused on the left side of figure 1 of document E1 where a single gripping carrier (product transfer station 14) takes unorderedly distributed items (16) from the bulk products station (10) and puts them on conveyor (24). Thus, they would have found no reason to introduce a plurality of gripping carriers in the system of document E2.

Furthermore, the arrangement of document E2 has constructional constraints which would render it not possible to introduce a further gripping carrier without major modifications, in particular since there is not enough installation space available.

The person skilled in the art would thus not have modified the system of document E2 to arrive at the subject-matter of the claim.

2.3 The Board cannot accept the opinion of the appellant and substantially concurs with the respondent for the reasons given below.

In the following discussion, it is assumed, to the appellant's benefit, that the items (16) are arranged on the population conveyor (26) of document E1 in "an unorderly form" and that the recirculating conveyor (12) of document E2 can be considered as constituting a "transport loop".

- 2.3.1 Starting from document E1 and faced with the problem of reintroducing in the system the items which have not been collected by the gripping means, the person skilled in the art would not have found in document E2 a technical solution that would have led them to the claimed subject-matter.

In document E2 a transport loop transferring items from a first to a second location of a transport conveyor is not shown. Recirculating conveyor (12) of document E2 rather recirculates the items within the conveyor itself in front of the gripping carrier (see figure 1 of document E2).

The person skilled in the art would have found no indication in document E2 to locate the recirculating conveyor (12) so that it extended from the end of the population conveyor (26) of document E1 to its beginning.

However, if the person skilled in the art would have considered introducing the recirculating conveyor of document E2 in the transfer system of document E1 in the way suggested by the appellant, they would not have been able to put this into practice since they would have realized that in this way the intended aim would not be achieved. As mentioned above the recirculating conveyor (12) of document E2 recirculates the items

within the conveyor; it does not transfer them from or to a location outside of the conveyor.

Even if the person skilled in the art would have considered adapting the recirculating conveyor of document E2 to make it capable of transferring items from the end of the population conveyor (26) to its beginning, they would have been kept from doing so by the fact that doing this would interfere with the proper functioning of the system of document E1.

As argued by the respondent, the person skilled in the art would have realized that, by reintroducing the items in the transfer system as suggested by the appellant, it would no longer be possible to associate the position coordinates of the objects (16) with the attribute of each object (16) previously measured by the attribute measurement device (20) (see paragraphs [0022], [0024] and figure 1 of E1). The proper functioning of the system of E1 would thus have been compromised.

The assertion that the reintroduction of the items into the transfer system would automatically have been taken into account by the control system of document E1, as argued by the appellant, remains unsubstantiated.

The argument that the person skilled in the art starting from document E1 would have arrived at the subject-matter of claim 8 in an obvious way in view of the teaching of E2 is thus not convincing.

2.3.2 When starting from document E2 with the aim of increasing the capacity and flexibility of the system of transferring items disclosed in E2, the person skilled in the art would have found no reason in

document E1 to introduce in the arrangement of Figure 1 of E2 a plurality of gripping carriers.

The appellant argues that the person skilled in the art would have derived from E1 the general idea of introducing in E2 a plurality of gripping carriers. However, it remains unsubstantiated where and how the person skilled in the art would have derived this general idea from the specific teaching of E1. This argument cannot therefore be accepted.

The Board accepts the argument of the respondent that due to the different constructional arrangements of E1 and E2 the person skilled in the art would not have introduced a plurality of gripping carriers into the system of E2.

In fact the conveyors 26 and 36 of E1 (see figure 1) are arranged parallel to each other. This arrangement allows for locating a plurality of gripping carriers along the longitudinal extension of the conveyors. In E2 the arrangement is different, as the conveyors 12 and 60 are arranged perpendicular to each other, and an arrangement of a plurality of gripping carriers at the crossing point of the conveyors appears not to be applicable. As argued by the respondent, a complete redesigning of the conveyors of E2 would have been necessary to add a further gripping carrier.

Thus, instead of taking the path suggested by the appellant, the person skilled in the art would have considered other technical solutions for increasing the capacity and flexibility of the system of E2.

The argument of the appellant, that the person skilled in the art would have introduced smaller gripping carriers does not appear to have support in E1. Nor is

it apparent where and how these smaller gripping carriers should be located.

The assertion that the necessary constructional changes in the system of document E2 would have been carried out by the person skilled in the art without any inventive activity, as argued by the appellant, thus remains unsubstantiated.

The argument that the person skilled in the art starting from the system of document E2 would have arrived at the subject-matter of claim 8 in an obvious way in view of the teaching of document E1 is therefore not convincing.

- 2.3.3 The presence or not of a synergistic effect among the features distinguishing the subject-matter of claim 8 from the system of transferring items of documents E1 and E2 does not affect the above analysis of inventive step and therefore does not need to be addressed by the Board.
- 2.3.4 In the written proceedings the appellant also contests that the opposition division has decided that the teaching of documents E1 and E2 cannot be combined in view of structural incompatibilities which are, however, not part of the subject-matter explicitly claimed and that such specific structural incompatibilities cannot as such render inventive the general idea of combining a transport loop with a plurality of independently controllable gripping carriers each carrying at least one of a plurality of gripping means (see point V.1.5. of the grounds of appeal).

As indicated by the Board in its communication pursuant to Article 15(1) RPBA (see page 10, first and second paragraph), this line of argument cannot be accepted since the question at stake in the present case is whether the person skilled in the art starting from the closest prior art would have arrived at the subject-matter of the claim without the need of inventive skills.

As indicated above, considering either the specific transfer system known from document E1 or E2 as the closest prior art and considering the specific teaching of the other document, E2 or E1 correspondingly, the person skilled in the art would not have modified the closest prior art to arrive at the subject-matter of claim 8 without the exercise of an inventive activity.

3. Inventive step of the subject-matter of claim 1 (Articles 100(a) and 56 EPC)

The parties consider that analogous arguments to those for claim 8 also apply to claim 1. The Board sees no reason not to share this view and considers that the arguments of the appellant are also not convincing for claim 1.

4. No other objections to the patent as granted are submitted by the appellant, as confirmed at the oral proceedings. The issues of admitting documents E6 to E10 into the proceedings and remitting the case to the opposition division are not decisive for the present decision because neither is relevant in respect of the patent as granted.
5. Therefore, the Board, in reviewing the decision under appeal on the basis of the parties' mutual submissions

in the appeal proceedings, has come to the conclusion that the appellant has not convincingly shown that the decision under appeal and its underlining reasons were incorrect in respect of inventive step within the meaning of Article 56 EPC of the subject-matter of claims 1 and 8 of the patent as granted in view of the teaching of documents E1 and E2.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



G. Nachtigall

I. Beckedorf

Decision electronically authenticated