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Datasheet for the decision of 11 August 2015

Case Number: T 1273/11 - 3.2.07

Application Number: 03739711.4

Publication Number: 1474347

IPC: B65G43/00, B65G15/32, B65G43/10, B65G47/26, B65G15/50, B65G47/53

Language of the proceedings: EN

Title of invention:
BELT CONVEYOR

Patent Proprietor:
Dematic Corp.

Opponent:
SSI Schäfer Peem GmbH

Headword:

Relevant legal provisions:
EPC Art. 56, 104(1)
RPBA Art. 13(1), 13(3)

Keyword:
Inventive step - (no)
Late-filed auxiliary requests - admitted (no)
Apportionment of costs - not equitable
Apportionment of costs - Board not competent (point 7.1)
Amendments coming from description -
additional search by opposition division requires remittal -
equivalent to postmonement oral proceedings (point 6.3)

Decisions cited:
T 1059/98, T 1732/10, T 0447/09

Catchword:

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Case Number: T 1273/11 - 3.2.07

D E C I S I O N
of Technical Board of Appeal 3.2.07
of 11 August 2015

Appellant: (Opponent)	SSI Schäfer Peem GmbH Fischeraustr. 27 8051 Graz (AT)
Representative:	Witte, Weller & Partner Patentanwälte mbB Postfach 10 54 62 70047 Stuttgart (DE)
Respondent: (Patent Proprietor)	Dematic Corp. 507 Plymouth Avenue, NE Grand Rapids, MI 49505 (US)
Representative:	Moser Götze & Partner Patentanwälte mbB Paul-Klinger-Strasse 9 45127 Essen (DE)
Decision under appeal:	**Decision of the Opposition Division of the European Patent Office posted on 31 March 2011 rejecting the opposition filed against European patent No. 1474347 pursuant to Article 101(2) EPC.**

Composition of the Board:

Chairman	H. Meinders
Members:	V. Bevilacqua
	C. Brandt

Summary of Facts and Submissions

I. The appellant (opponent) lodged an appeal against the decision rejecting the opposition against European patent EP-B-1 474 347, and requested that the decision under appeal be set aside and that the patent be revoked.

He also submitted further written evidence and offered two new witnesses.

II. The respondent (patent proprietor) requested that the appeal be dismissed, alternatively, that the decision under appeal be set aside and the patent be maintained on the basis of any of the auxiliary requests 1 to 4, filed with the statement setting out the grounds of appeal, or on the basis of any of the auxiliary requests 5 or 6, filed with the letter dated 23 June 2015.

Additionally the respondent requested not to admit the new evidence submitted with the statement of grounds of appeal, and that his costs be apportioned to the appellant.

III. The following documents of the opposition proceedings are mentioned in the present decision:
D1 : JP 2000-318825
D4 : US 6 378 694
D5 : “Rapplon new Product UU8ERF/UU10ERF” 1998

IV. The wording of independent claim 1 of the **main request**, corresponding to claim 1 of the patent as granted, reads as follows:

"Accumulation conveyor (10, 110, 110', 110") comprising:
opposite sidewalls (14, 14');
at least two tandem zones (12, 112, 112', 112"), each of said at least two tandem zones (12, 112, 112', 112") comprising:
a motorized roller (20, 120) and at least one other roller (22, 22a, 122) rotatably mounted at and between opposite sidewalls (14, 14');
at least one article sensor (124) operable to detect articles in that zone (12, 112, 112', 112"); and at least one control (126), said at least one control being operable to control said motorized roller (20, 120) of at least one of said zones (12, 112, 112', 112") to drive said belt (18, 118) to convey articles along the respective zone (12, 112, 112', 112"), said at least one control (126) being operable to selectively control said motorized rollers (20, 120) in response to said article sensors (124) to provide accumulation of articles in said zones (12, 112, 112', 112") of said accumulator (10, 110, 110', 110")

characterized by a continuous belt (18, 118) for conveying articles reeved around said motorized roller (20, 120) and said at least one other roller (22, 22a, 122), said continuous belt (18, 118) of each of said tandem zones (12, 112, 112', 112") comprising a low modulus characteristic, wherein said belt (18, 118) is initially stretched in a lengthwise direction of said belt (18, 118) at least 0.75% when said belt (18, 118) is reeved around said rollers (20, 120, 22, 22a, 122)."

The wording of independent claim 1 of the **first auxiliary request** reads as follows (amendments over the main request are highlighted by the Board):

"Accumulation conveyor (10, 110, 110', 110") comprising:
opposite sidewalls (14, 114);
at least two tandem zones (12, 112, 112', 112"), each of said at least two tandem zones (12, 112, 112', 112") comprising:
a motorized roller (20, 120) and at least one other roller (22, 22a, 122) rotatably mounted at and between **said** opposite sidewalls (14, 114);
at least one article sensor (124) operable to detect articles in that zone (12, 112, 112', 112''); and at least one control (126), said at least one control (126) being operable to control said motorized roller (20, 120) of at least one of said zones (12, 112, 112', 112") to drive ~~said~~ **a continuous** belt (18, 118) to convey articles along the respective zone (12, 112, 112', 112"), said at least one control (126) being operable to selectively control said motorized rollers (20, 120) in response to said article sensors (124) to provide accumulation of articles in said zones (12, 112, 112', l12") of said accumulator (10, 110, 110', 110")

characterized by ~~a~~ **said** continuous belt (18, 118) for conveying articles reeved around said motorized roller (20, 120) and said at least one other roller (22, 22a, 122), said continuous belt (18, I 18) of each of said tandem zones (12, 112, 112', 112") comprising a low modulus characteristic, wherein said belt (18, 118) is initially stretched in a lengthwise direction of said belt (18, 118) at least 0.75% when said belt (18, 118) is reeved around said rollers (20, 120, 22, 22a, 122) **and said belt (18, 118) has a width which spans substantially the spacing between said sidewalls (14, 114)."**

The wording of independent claim 1 of the **second auxiliary request** reads as follows (amendments over the main request are highlighted by the Board):

"Accumulation conveyor (10, 110, 110', 110") comprising:
opposite sidewalls (14, 114); at least two tandem zones (12, 112, 112', 112"), each of said at least two tandem zones (12, 112, 112', 112") comprising:
a motorized roller (20, 120) and at least one other roller (22, 22a, 122) rotatably mounted at and between **said** opposite sidewalls (14, 114);
at least one article sensor (124) operable to detect articles in that zone (12, 112, 112', 112''); and at least one control (126), said at least one control (126) being operable to control said motorized roller (20, 120) of at least one of said zones (12, 112, 112', 112") to drive ~~said~~ **a continuous** belt (18, 118) to convey articles along the respective zone (12, 112, 112', 112"), said at least one control (126) being operable to selectively control said motorized rollers (20, 120) in response to said article sensors (124) to provide accumulation of articles in said zones (12, 112, 112', 112") of said accumulator(10, 110, 110', 110")

characterized by ~~a~~ **said** continuous belt (18, 118) for conveying articles reeved around said motorized roller (20, 120) and said at least one other roller (22, 22a, 122), said continuous belt (18, 118) of each of said tandem zones (12, 112, 112', 112") comprising a low modulus characteristic, wherein said belt (18, 118) is initially stretched in a lengthwise direction of said belt (18, 118) at least 0.75% when said belt (18, 118) is reeved around said rollers (20, 120, 22, 22a, 122) **wherein said motorized roller (20, 120) of each of said**

at least two zones (12, 112, 112', 112") comprises one of an AC motor, a 24 volt DC motor, a 42 volt DC motor and a 48 volt DC motor."

The wording of independent claim 1 of the **third auxiliary request** reads as follows (amendments over the main request are highlighted by the Board):

"Accumulation conveyor (10, 110, 110', 110") comprising:
opposite sidewalls (14, 114); at least two tandem zones (12, 112, 112', 112"), each of said at least two tandem zones (12, 112, 112', 112") comprising:
a motorized roller (20, 120) and at least one other roller (22, 22a, 122) rotatably mounted at and between **said** opposite sidewalls (14, 114);
at least one article sensor (124) operable to detect articles in that zone (12, 112, 112', 112"); and at least one control (126), said at least one control (126) being operable to control said motorized roller (20, 120) of at least one of said zones (12, 112, 112', 112") to drive ~~said~~ **a continuous** belt(18, 118) to convey articles along the respective zone (12, 112, 112', 112"), said at least one control (126) being operable to selectively control said motorized rollers (20, 120) in response to said article sensors (124) to provide accumulation of articles in said zones (12, 112, 112', 112") of said accumulator (10, 110, 110', 110")

characterized by ~~a~~ **said** continuous belt (18, 118) for conveying articles reeved around said motorized roller (20, 120) and said at least one other roller (22, 22a, 122), said continuous belt (18, 118) of each of said tandem zones (12, 112, 112', 112") comprising a low modulus characteristic, wherein said belt (18, 118) is

initially stretched in a lengthwise direction of said belt (18, 118) at least ~~0,75%~~ **1%** when said belt (18, 118) is reeved around said rollers (20, 120, 22, 22a, 122)."

The wording of independent claim 1 of the **fourth auxiliary request** reads as follows (amendments over the main request are highlighted by the Board):

"Accumulation conveyor (10, 110, 110', 110") comprising:
opposite sidewalls (14, 114); at least two tandem zones (12, 112, 112', 112"), each of said at least two tandem zones (12, 112, 112', 112") comprising:
a motorized roller (20, 120) and at least one other roller (22, 22a, 122) rotatably mounted at and between **said** opposite sidewalls (14, 114);
at least one article sensor (124) operable to detect articles in that zone (12, 112, 112', 112"); and at least one control (126), said at least one control (126) being operable to control said motorized roller (20, 120) of at least one of said zones (12, 112, 112', 112") to drive ~~said~~ **a continuous** belt(18, 118) to convey articles along the respective zone (12, 112, 112', 112"), said at least one control (126) being operable to selectively control said motorized rollers (20, 120) in response to said article sensors (124) to provide accumulation of articles in said zones (12, 112, 112', 112") of said accumulator (10, 110, 110', 110")

characterized by ~~a~~ **said** continuous belt (18, 118) for conveying articles reeved around said motorized roller (20, 120) and said at least one other roller (22, 22a, 122), said continuous belt (18, 118) of each of said tandem zones (12, 112, 112', 112") comprising a low

modulus characteristic, wherein said belt (18, 118) is initially stretched in a lengthwise direction of said belt (18, 118) at least ~~0,75%~~ **1,5%** when said belt (18, 118) is reeved around said rollers (20, 120, 22, 22a, 122)."

The wording of independent claim 1 of the **fifth auxiliary request** corresponds to the wording of claim 1 of the main request with the following additional features added to its characterising portion:

"wherein said motorized roller comprises a DC brushless motor operable at speeds between ca. 130 rpm and 1150 rpm and provides an output of ca. 3 Nm of torque at ca. 400 rpm and ca.1,5 Nm at ca. 1150 rpm."

The wording of independent claim 1 of the **sixth auxiliary request** corresponds to the wording of claim 1 of the main request with the following additional features added to its characterising portion:

"wherein said motorized roller comprises a 48 Volt DC brushless motor operable at speeds between ca. 130 rpm and 1150 rpm and provides an output of ca. 3 Nm of torque at ca. 400 rpm and ca.1,5 Nm at ca. 1150 rpm."

V. The appellant argues, insofar as relevant for the present decision, essentially as follows.

The claims submitted by the patent proprietor do not benefit from the priority date of 11 February 2002.

The content of the disclosure of D1 and D4 is the same, and the accumulation conveyor disclosed in D1 represents a suitable starting point to discuss

inventive step of the subject-matter of the independent claims of all the requests on file.

This accumulation conveyor comprises continuous belts in tandem zones, the only difference with the subject-matter of claim 1 of the patent as granted being that the continuous belt of each of said tandem zones comprises "a low modulus characteristic, wherein said belt is initially stretched in a lengthwise direction of said belt at least 0.75% when said belt is reeved around its rollers".

The problem to be solved by these difference is "how to avoid subsequent adjustment of the belt tension in the conveyor of D1".

D5 discloses elastic belts with a low modulus characteristic, having the advantage that no take up adjustment is needed, and teaches that said belts could be initially stretched up to 6% in a lengthwise direction when they are reeved around their rollers.

Inventive step should not be acknowledged, because by simply using one of these belts in the apparatus disclosed in D1 the skilled person would straightforwardly come to the subject-matter of claim 1 of the main request.

As the belts of D5 could also be initially stretched more than 1% and 1,5% (namely up to 6%), the same conclusion applies to the subject-matter of the independent claim 1 of the third and fourth auxiliary requests, which are therefore also considered as lacking inventive step.

The subject-matter of claim 1 of the first auxiliary request also lacks inventive step over this combination of documents, because D5 mentions wide belts.

As no inventive step is needed for a skilled person to select an appropriate motor for a particular conveying application, and this selection can be done independently from the selection of the belt type, the subject-matter of claim 1 of the second auxiliary request also lacks inventive step.

The fifth and sixth auxiliary requests should not be admitted into the proceedings because they are late filed and they are not clearly allowable, as the features added to the respective independent claims result from unallowable generalizations of a specific embodiment in the description.

Concerning the request for a different apportionment of costs, the appellant remarks that as this request relates to costs incurred during the opposition proceedings, it should have been presented before the opposition division and not before the Board.

VI. The respondent argues, insofar as relevant for the present decision, essentially as follows.

The appellant deliberately decided, for tactical reasons, not to attend the oral proceedings in opposition. All the costs incurred by the respondent for the preparation of the first instance oral proceedings should therefore be apportioned to the appellant.

Also the costs related to the present appeal have been deliberately provoked by the appellant, and should be

apportioned to him. This is because he withheld relevant material from the first instance proceedings, and therefore prevented the opposition division from taking a complete decision encompassing also this material.

In addition, the new evidence submitted abusively with the notice of appeal should be excluded by the Board because there is no justification or explanation from the appellant, as to why these documents should be admitted in the proceedings, and also because of their lack of relevance.

The respondent concedes that the priority date of 11 February 2002 is not valid for the present claims 1 of all requests.

He also acknowledges that the disclosure of documents D1 and D4 is the same, and that the accumulation conveyor disclosed therein represents a suitable starting point to discuss inventive step.

The respondent also does not contest the differences identified by the opponent, but starting from these features formulates **a different problem** to be solved, namely "how to select a belt for the accumulation conveyor mentioned in D4 (and in D1)".

Inventive step should be acknowledged because the belts shown in D5 are not foreseen for transporting and accumulating heavy loads, but would be used by a skilled person only to convey mail or similar light objects.

The same conclusion applies to the subject-matter of the independent claim 1 of the third and fourth

auxiliary requests mentioning higher percentages of stretch, which should therefore also be considered as inventive.

The subject-matter of claim 1 of the first auxiliary request is additionally inventive because D5 only discloses narrow belts ("Riemchen").

As the additional difference (the motor) of claim 1 of the second auxiliary request clearly interacts with the difference already discussed for the main request (the belt) there is a single problem to be solved by the skilled person, namely how to modify the known accumulation conveyor in order to make it suitable for transporting and accumulating heavy objects.

Inventive step should be acknowledged as the proposed solution is not found in any of the available documents.

The fifth and sixth auxiliary requests should be admitted into the proceedings because, although being late filed, they are a reaction to the communication of the Board and have been submitted timely before the oral proceedings, such that the appellant had enough time to do a search and prepare for discussing them. They are also clearly allowable.

Reasons for the Decision

1. *Validity of the priority*

As acknowledged by both parties, the priority for the subject-matter of claim 1 of the main request as well as the first and second auxiliary requests is not valid because neither priority document mentions a continuous

belt which is initially stretched in a lengthwise direction of said belt by **at least 0.75%** when said belt is reeved around said rollers.

The same applies for the claims 1 of the third and fourth auxiliary requests, because neither priority document mentions the initial stretch in a lengthwise direction of said belt to be at least 1%, respectively 1,5%, when said belt is reeved around said rollers.

As a consequence of the above, the effective date for the claims 1 of all these requests is the filing date of the patent in suit: 7 February 2003.

2. *Inventive step - claim 1*

2.1 D4 as starting point

D4 is comprised in the state of the art (Article 54(2) EPC) because it was published on 30 April 2002, before the effective date of the patent in suit as established above (7 February 2003).

The accumulation conveyor disclosed in this document features a continuous belt reeved around rollers (see column 11, lines 1-5), has most of the features of the subject-matter of claim 1 of the main request (see the following point 2.2) and therefore clearly represents a suitable starting point for discussing inventive step.

2.2 Content of the disclosure of D4

D4 discloses an accumulation conveyor, see column 1, lines 57-61 explaining that if there is an upstream delay the conveyor avoids collisions by accumulating the objects transported, see also figures 7a and 7b,

together with column 7, lines 44-59, where the accumulation process is explained, and column 11, lines 1-5, explaining that also belt conveyors could perform this function.

This conveyor comprises opposite sidewalls ((13), see figure 2a); these sidewalls are also necessarily present in the embodiment of column 11, lines 1-5, as otherwise the rollers could not be mounted.

The conveyor also comprises:

at least two tandem zones (these zones are called conveying sections, see column 7, starting from line 44, and are clearly shown in figures 5-10b and mentioned in the embodiment of column 11, lines 1-5),

each of said at least two tandem zones comprising: a motorized roller ((14), see column 11, line 5) and at least one other roller ((15), which must also be necessarily present in the embodiment of column 11, lines 1-5) rotatably mounted at and between opposite sidewalls (as depicted in figure 2a, see also column 4, lines 19-33);

at least one article sensor ((26), see column 5, lines 45-52) operable to detect articles in that zone (as explained at column 6, lines 31-66); and

at least one control ((41), see figure 1), said at least one control being operable to control said motorized roller (14) of at least one of said zones to drive said roll (14) and therefore also the belt mentioned at column 11, lines 1-5, to convey articles along the respective zone (see column 6, lines 43-67);

said at least one control ((41), see figure 1) being operable to selectively control said motorized rollers (14) in response to said article sensors (26) to provide accumulation of articles in said zones of said accumulator.

This last feature is disclosed at column 1, lines 57-61 explaining that if there is an upstream delay the conveyor avoids collisions by accumulating the objects transported, and figures 7a and 7b, together with column 7, lines 44-59, where the accumulation process is explained, and column 11, lines 1-5, explaining that also belt conveyors could perform this function.

D4 also discloses a continuous belt (see column 11, lines 1-5) for conveying articles that must be reeved around said motorized roller (14) and said at least one other roller (15) for the device to function also with a belt.

2.3 Differences

2.3.1 D4 only mentions this belt, without further describing it, and therefore fails to disclose that:

-this known continuous belt of each of said tandem zones comprises a low modulus characteristic, and that

-said belt is initially stretched in a lengthwise direction of said belt at least 0.75% when said belt is reeved around said rollers.

2.3.2 According to the description of the patent in suit the first difference ("low modulus") implies an elastic belt with a low elastic modulus, which therefore elongates more than a high modulus belt when both are

subjected to the same load in the longitudinal direction (see paragraph [0020]).

The second difference (0,75% stretch) has two possible interpretations:

-that the belt is stretched in a lengthwise direction of said belt at least 0.75% **during the process of reeving**;
-the belt is stretched in a lengthwise direction of said belt at least 0.75% **after the reeving step**.

The skilled person would, however, only take the second interpretation into consideration, even if, as argued by the appellant, the description of the patent in suit does not provide any explicit guidance for choosing between the two alternatives.

This is because the minimum stretching value in the assembled state (after the reeving step) is very significant, as it is closely related to the minimal tension in the belt, and therefore to the value of the forces preventing the belt from slipping on the rollers.

Moreover, the minimum value of the stretching achieved during assembly (first interpretation) would have no practical significance in the eyes of a skilled person, as it does not influence the subsequent behaviour and functioning of the belt (only the maximum may become significant, as excessive values suitable to damage the belt should be avoided).

2.4 Effect

The description of the patent in suit (see column 5, lines 43-47) mentions the following effect:

"the low modulus characteristic of belt 18 and the approximately 0,75% or more initial stretch of belt 18 allows each zone 12 of the belt conveyor to be operated with little or no take-up or adjustment being necessary to maintain the appropriate tension of the belt 18"

2.5 Problem to be solved

2.5.1 The respondent criticises, during the written proceedings, the problem formulated by the appellant ("how to avoid tension adjustment") and refers to column 5, lines 47-49 of the description of the patent in suit which mention:

"adjustment may be provided on belt conveyor 10, without effecting the scope of the present invention".

The Board takes this argumentation into account and reformulates the problem as:

"how to select a belt type for the conveyor of D4 which minimizes tension adjustments after said belt has been reeved on its rolls".

The respondent argued during the oral proceedings that this reformulation by the Board is also not correct, as the problem to be solved should not mention effects or advantages of the invention, as these lead the skilled person towards the solution, thereby resulting in an *ex post facto* analysis of inventive step.

The Board disagrees. The formulation of an objective technical problem **should** be based on the technical

effect of the distinguishing features (see the Case Law of the Boards of Appeal, 7th edition 2013, I.D.4.3.1).

Such a reference to the effect is therefore rather a compulsory element than an inadmissible pointer to, or even an element of the solution.

2.5.2 The respondent also argued during the written proceedings that the problem to be solved should include two further requirements, namely that the accumulation conveyor should be suitable for transporting **high loads** and for being operated in an **inclined position**.

The Board disagrees again, because there are no features in claim 1 of the main request related to transporting of heavy loads or to conveying in inclined orientations.

2.6 Discussion on inventive step

The Board considers that a skilled person looking for a solution to the problem formulated above would have taken the products mentioned in D5 (RAPPLON UU8ERF, RAPPLON UU10ERF) into consideration.

This is because, in spite of the fact that D5 mentions "general light conveying" (see the second page of the datasheet, under "Applications"), the aim of the skilled person is to provide the known belt accumulation conveyor (see D4, column 11, lines 1-5) with a belt which guarantees an appropriate tension, without the need of frequent adjustments. Further, as already stated, claim 1 does not refer in any way to the transport of heavy loads.

The skilled person would immediately notice that one of the advantages of using the elastic belts of D5 is that (see again the datasheet, now under "Customer Benefits") no take-up adjustment is required.

As (see again "Customer Benefits") assembly tolerances become less critical due to the low modulus, he would have no difficulties in applying the belts made of the materials of D5 in the conveyor of D4.

D5 discloses elastic belts with a low modulus characteristic, and teaches that said belts should be stretched in use at least 3% (up to 6%, see the "Recommended elongation").

In conclusion, by simply using a belt made of RAPPLON UU8ERF (or RAPPLON UU10E RF) in the apparatus disclosed in D4, and following the recommendations given in the datasheets (D5) the skilled person would directly and straightforwardly come to the subject-matter of claim 1 of the main request.

3. *First auxiliary request*

3.1 Compared with claim 1 of the main request, claim 1 of the first auxiliary request comprises the following additional features:

the belt is continuous, and has a width which spans substantially the spacing between the sidewalls of the conveyor.

According to the respondent, the application of the teaching of D5 to the conveyor of D4 would not lead to such a conveyor, since D5 relates to narrow belts

("Auslegeriemchen", see D5, Anwendungen) or belts of undefined width ("Maschinenband").

3.2 For the Board, both these features are implicitly disclosed in D4.

To be mounted and tensioned on the two rolls, the belt as referred to in column 11, lines 1-5, has to be continuous.

As far as the width is concerned: the Board concurs with the appellant's argument voiced at the oral proceedings that claim 1 does not specify any width of the belt. Therefore, even if D5 would be referring to belts of relative small width, this cannot detract from the application of D5's teaching. In any case, for an accumulation conveyor as in D4 the belt width has to substantially correspond to the width of the rollers, and to the width between the sidewalls, to maximize the contact surface with the accumulated objects and therefore the friction and to avoid objects to get stuck between the belt and the sidewalls.

As the additional features are also disclosed in D4, the subject-matter of claim 1 of the first auxiliary request lacks inventive step over the combination of teachings of documents D4 and D5, for the same reasons already discussed above (see point 2.6) for the main request.

4. *Second auxiliary request - claim 1*

4.1 Compared with claim 1 of the main request, claim 1 of the second auxiliary request comprises the following additional features:
-that the belt is continuous;

-that the motorized roller of each of said at least two zones comprises one of an AC motor, a 24 Volt DC motor, a 42 Volt Dc motor and a 48 Volt DC motor.

As discussed above in relation to the first auxiliary request, D4 implicitly discloses the feature that the belt is continuous.

D4 also discloses (see column 5, lines 28-37) that the motorized roller of each of said at least two zones comprises a DC motor, without specifying its nominal voltage.

Starting from D4 there is therefore, in comparison with claim 1 of the main request, only one additional distinguishing feature, namely that the DC motor is a 24 Volt DC motor, a 42 Volt DC motor or a 48 Volt DC motor.

As these are standard voltages, they merely achieve the effect that a suitable motor for a particular application of the conveyor of D4 is selected.

This is particularly true as the description of the patent in suit does not mention any other particular effect obtained by this selection.

The effect achieved by the choice of DC voltage is clearly not linked or related to the effect achieved by the selection of the elastic belt (little or no take-up adjustment).

Since there is no synergy between the two effects, a partial problem related only to this difference (how to achieve the above mentioned effect), has to be formulated and discussed separately from the problem

related to the elasticity of the belt, which was already discussed in relation to the main request.

To reduce the accumulation conveyor of D4 to practice the skilled person needs to select the nominal voltage of the DC. Common standard values for such motors are: 24V, 42V, 48V.

A skilled person selects the appropriate motor DC voltage without the need of inventive step, by simply taking account of the constraints/requirements of the particular application of the conveyor like, for example, the voltage already available. This is clearly a matter of normal design practice.

For these reasons, no inventive step can be acknowledged for the subject-matter of claim 1 of the second auxiliary request.

4.2 The respondent argues that the motors now claimed are only used in high load applications, and that this feature interacts with the other distinguishing feature (the elasticity of the belt) because a common effect is achieved, namely that the accumulation conveyor becomes particularly suitable for transporting high loads.

As a consequence, the partial problems approach should not be used, and inventive step should be discussed referring to a single problem formulated for all the distinguishing features taken together as "how to modify the accumulation conveyor of D4 by making it suitable for transporting heavy objects".

The Board disagrees, because, as discussed above, no interrelation between these distinguishing features can be recognised, in particular because also the patent in

suit does not mention the ability to carry high loads as the effect achieved by these voltages.

5. *Third and fourth auxiliary requests - claim 1*

No inventive step can be acknowledged for the subject-matter of these claims, for the reasons as already discussed for the main request.

This is because by applying the belts of D5 and using them with the indicated stretching (3-6%) the skilled person would also come within the ranges claimed in claim 1 of the third auxiliary request (at least 1%) and in claim 1 of the fourth auxiliary request (at least 1,5%).

6. *Admissibility of the fifth and sixth auxiliary requests*

6.1 These requests have been filed with letter of 23 June 2015, i.e. after the first exchange of the statement of grounds of appeal and the reply thereto. Moreover, they were filed after the issue of summons to oral proceedings.

Amended claims may be admitted into the proceedings even if they have been late filed, if the introduced amendments are properly justified, e.g. can be seen as a (timely) response to objections or evidence which were not part of the decision under appeal, the first exchange in appeal or were raised by the Board. According to the jurisprudence (see Case Law of the Boards of Appeal, 7th edition 2013, chapter IV.E. 4.4.1), they should also be clearly allowable (Article 13(1) RPBA).

Such is the case when the Board can quickly ascertain that they do not give rise to new objections and that they overcome all outstanding objections, see Case Law of the Boards of Appeal, 7th edition, 2013, IV.E.4.4.2, first paragraph.

According to Article 13(3) RPBA amendments sought to be made after oral proceedings have been arranged shall not be admitted if they raise issues which the Board or the other party or parties cannot reasonably be expected to deal with **without adjournment of the oral proceedings**.

6.2 Article 13(1) RPBA

According to Article 13(1) RPBA any amendment to a party's case after it has filed its grounds of appeal or reply may be admitted at the Board's discretion. The discretion shall be exercised in view of inter alia the complexity of the new subject-matter submitted, the current state of the proceedings and the need for procedural economy. Considering these criteria the Board has come to the conclusion that the fifth and sixth auxiliary requests are not to be admitted.

The Board does not share the respondent's view that the late filing of these auxiliary requests was justified as a response to the Board's communication. The latter did not contain any invitation or directions for the appellant to file such requests. In respect of the type of motors to be used, it was not introducing new aspects either, since the remarks made by the Board were not different from what was raised by the appellant in its opposition.

As far as it concerns the "clear allowability" of the claims 1 of the fifth and sixth auxiliary requests the Board follows the appellant's argument that the added features, further characterizing the motorized roller, already *prima facie* result in an inadmissible intermediate generalisation of the roller as described at page 6, lines 14-26 of the description as originally filed. In that passage there is not only a mention of a 48 V DC motorized roller: it should also have a diameter of approximately 50 mm and an overall width of between 500 and 900 mm. If the argument of transporting heavy loads is to hold good, at least such features should also have been taken up in claim 1.

The Board concludes that the absence of these features leads to the claiming of a roller of any possible diameter and any possible length, without basis in the originally filed application.

The requirements of Article 123(2) EPC are therefore *prima facie* not fulfilled.

6.3 Article 13(3) RPBA

The features added to claim 1, relating to the type of motor chosen, come from the description. This leads directly to the question whether such features have been included in the original search, or whether an additional search would be necessary.

6.3.1 Since the description is rather indifferent on the choice of motor (no particular effect is mentioned for any of the choices) it is unlikely that these features were included in the original search (Guidelines B-III, 3,5).

6.3.2 This leads to the question whether it falls upon the appellant/opponent to perform such a search. The respondent argued that the six weeks available to the appellant should suffice. However, the Board questions whether it is actually incumbent on the appellant/ opponent, in the present case, to perform such a search. It would be more a question of a remittal to the opposition division to perform or order an additional search (Guidelines, D-VI, 5, see also T 1732/10, point 1.5 and T 447/09, point 2.3 of the reasons).

6.3.3 Remittal of the case to the opposition division is equivalent to adjournment of the oral proceedings. According to the consistent jurisprudence of the Boards of Appeal in respect of an amendment of a party's case after oral proceedings have been summoned, Article 13(3) RPBA speaks against the admissibility of such requests when they lead to such an adjournment, see also Case Law of the Boards of Appeal, 7th edition, 2013, IV.E.4.4.7, second paragraph.

6.4 In view of the above negative conclusions regarding admissibility of these late filed requests, the Board decides, in accordance with Articles 13(1) and 13(3) RPBA, not to admit the fifth and sixth auxiliary requests into the proceedings.

7. *Apportionment of costs*

7.1 The respondent argues that the appellant deliberately decided, for tactical reasons, not to attend the oral proceedings in opposition and now abusively submits new material.

For these reasons he requests that the costs he has incurred in the present appeal proceedings be apportioned to the appellant.

This request is refused, for the following reasons.

The mere fact that an appeal against an adverse decision has been filed, and further documents have been submitted with the statement of grounds of appeal according to Article 12(2) RPBA, does not justify a finding that there has been an abuse on the part of the appellant. These documents can be seen as a legitimate response to the decision under appeal and further supplement the line of argumentation which had been unsuccessful before the opposition division, more in particular they support the arguments based on the application of standard technical knowledge by the skilled person.

In the present case the Board does not see any need or obligation that the appellant should have filed such further material already in the opposition proceedings, this rather being a matter of normal party disposition.

In the present case, for the reasons above, the submission of these new documents does not justify a deviation from the normal rule that each party bears its own costs (Article 104 EPC).

This request of the respondent for apportionment of costs must therefore be rejected.

7.2 The respondent requested during oral proceedings a different apportionment of costs in relation to the additional costs incurred because of the extremely late cancellation of the oral proceedings before the

opposition division. These proceedings were to be held on a Monday, the opponent only notified its absence on the preceding Friday; the oral proceedings were cancelled by fax on that same day.

The Board establishes that this request was not submitted before the opposition division, nor did the opposition division consider and decide upon such matter in the decision under appeal.

The Board concurs with T 1059/98 (reasons point 22) which states:

"Article 21(1) EPC provides that a Board of Appeal can only examine appeals from decisions of the first instance departments of the EPO. This clearly means, in the circumstances of the present case, that the Board cannot examine and decide upon a request for apportionment of costs incurred as a result of oral proceedings before the opposition division, if that request was presented for the first time before the Board of Appeal and thus no decision has been taken on this request by the first instance."

Also this request must therefore be rejected.

8. Procedural requests

The above mentioned lack of inventive step over the combination of the teachings of documents D4 and D5 is the basis for taking the present decision, revoking the patent in suit. There is therefore no need to discuss other issues raised by the parties (like, for example the admissibility of the further evidence submitted with the statement of grounds of appeal) or to hear evidence from the witnesses offered by the appellant.

Order

For these reasons it is decided that:

The decision under appeal is set aside.

European patent No. 1 474 347 is revoked.

The Registrar: The Chairman:

S. Sánchez Chiquero H. Meinders

Decision electronically authenticated