Case Number: T 2319/11 - 3.2.07
Application Number: 07754425.2
Publication Number: 1999041
IPC: B65G 15/54
Language of the proceedings: EN
Title of invention: Spiral-link belt with drive bars
Applicant: ALBANY INTERNATIONAL CORP.
Headword: -
Relevant legal provisions: EPC Art. 54(1), 69
Keyword: "Novelty - all requests (no)"
Decisions cited: T 0488/97, T 0023/86, T 0016/87, T 0476/89, T 0625/91, T 0176/89
Catchword: -
Case Number: T 2319/11 - 3.2.07

DECISION
of the Technical Board of Appeal 3.2.07
of 19 September 2013

Appellant: ALBANY INTERNATIONAL CORP.
(Applicant)
1373 Broadway
Albany, New York 12204   (US)

Representative: Bugnion Genève
Bugnion S.A.
Conseils en Propriété Industrielle
Route de Florissant 10
Case Postale 375
CH-1211 Genève 12   (CH)

Decision under appeal: Decision of the Examining Division of the European Patent Office posted 14 June 2011 refusing European patent application No. 07754425.2 pursuant to Article 97(2) EPC.

Composition of the Board:
Chairman: H. Meinders
Members: G. Patton
E. Kossonakou
Summary of Facts and Submissions

I. The applicant (appellant) lodged an appeal against the decision of the Examining Division to refuse the European patent application No. 07 754 425.2.

II. The following document considered in the impugned decision is referred to:

D1: DE-A1-42 18 884

III. According to the impugned decision, the claimed subject-matter of the then main request was lacking novelty over D1 (Article 54(1) EPC) and of the then auxiliary request was lacking an inventive step on the basis of D1 (Article 56 EPC).

IV. With the statement of grounds of appeal the appellant maintained the above mentioned requests.

V. In the annex to the summons to oral proceedings the Board presented its preliminary non-binding opinion with respect to the requests on file, in that the subject-matter of the claims 1 of both requests was regarded as lacking novelty over D1. Additionally, the amendments to claim 1 of the auxiliary request were considered as contravening Article 123(2) EPC.

VI. In reaction, the appellant filed on 27 August 2013 a main and a first auxiliary request replacing those on file, together with a second auxiliary request.

VII. Oral proceedings took place on 19 September 2013 during which the appellant filed a new second auxiliary
request replacing the one on file. All requests were discussed for compliance with Article 54 EPC.

The Board announced its decision at the end of the oral proceedings.

VIII. The appellant requests that the decision under appeal be set aside and that a patent be granted on the basis of the main or the first auxiliary request, filed with the appellant's submissions dated 27 August 2013, or of the second auxiliary request filed at the oral proceedings held on 19 September 2013.

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

"A spiral-link belt, comprising:
a belt body formed of a series of cross-machine direction (CD) spiral coils (201, 202, 204, 206) linked by pintles (203, 205, 207) in the CD to form an endless loop; and
a plurality of CD drive bars integrated into said belt body;
wherein each CD drive bar is formed of a first spiral coil (204) attached to a second spiral coil (202) in the belt body and of a third spiral coil (206) attached to a fourth spiral coil in the belt body; the first (204) and third (206) spiral coils being linked together out of the plane of the belt body."

Independent claim 1 of the first auxiliary request reads as follows (in bold the amendments as compared to claim 1 of the main request; emphasis added by the Board):
"A spiral-link belt, comprising:
a belt body formed of a series of cross-machine direction (CD) spiral coils (201, 202, 204, 206, 301, 302, 304, 306, 309, 310) linked by pintles (203, 205, 207, 303, 305, 307) in the CD to form an endless loop; and
a plurality of CD drive bars integrated into said belt body;
wherein each CD drive bar is formed of a first spiral coil (204, 304) attached to a second spiral coil (202, 302) in the belt body and a third spiral coil (206, 306) attached to a fourth spiral coil in the belt body; the first (204) and third (206) spiral coils being linked together out of the plane of the belt body either by means of one pintle (205) or by means of a fifth (309) and a sixth (310) spiral coil, one end of the fifth spiral coil (309) being attached to one end of the first spiral coil (304) and one end of the sixth spiral coil (310) being attached to one end of the third spiral coil (306), the other end of said fifth (309) and sixth (310) spiral coil being attached together out of the plane of the belt body using one pintle (305)."

Independent claim 1 of the second auxiliary request reads as follows (in bold the amendments as compared to claim 1 of the main request; emphasis added by the Board):

"A spiral-link belt, comprising:
a belt body formed of a series of cross-machine direction (CD) spiral coils (201, 202, 204, 206) linked by pintles (203, 205, 207) in the CD to form an endless
loop; and
a plurality of CD drive bars integrated into said belt body;
wherein each CD drive bar is formed of a first spiral coil (204) attached to a second spiral coil (202) in the belt body and of a third spiral coil (206) attached to a fourth spiral coil in the belt body; the first (204) and third (206) spiral coils being linked together out of the plane of the belt body, so that the spiral-link belt is suitable for being used as a conveyor belt and as a cogged belt."

X. The arguments of the appellant are essentially as follows:

Main request

The expression used in claim 1 "linked together" is ambiguous so that the description has to be used in order to interpret it in accordance with Article 69(1) EPC. The criteria used by a judge in litigation cases should be applied and the Board is compelled to do the same by the provision of Article 69 EPC and its protocol in the EPC. Therefore, claim 1 is to be seen as being limited to the embodiments of the description (first and third coils attached using one pintle as in figure 2 or using only two additional spiral coils as in figure 3). Since these specific embodiments are not disclosed in D1, novelty has to be acknowledged.

First auxiliary request

The criteria for recognizing novelty of a selection invention cannot be applied. Claim 1 is specific since
it encompasses only two alternatives while the disclosure of D1 is generic comprising an indefinite number of alternatives. Since a generic disclosure cannot anticipate a specific disclosure, novelty has to be acknowledged.

In addition, since all the embodiments according to the invention of D1 comprise stiffening rods, the skilled reader would consider the belt of D1 as mandatorily comprising such rods. As a result, since claim 1 does not include stiffening rods, this is a distinguishing feature over claim 1 and, hence, the claimed belt cannot be regarded as merely a selection from the belts known from D1.

Second auxiliary request

Even if the skilled person "could" think of using the belt of D1 as a cogged conveyor, he "would" certainly not do it, since D1 neither discloses nor suggests that the belt is used as a cogged belt.

The difference between the known and the claimed belt is similar to why a "hook for fishing" is not suitable as a "hook for a crane" since the conveyor belt as disclosed is not suitable for use as a cogged belt.
Reasons for the Decision

1. Main request

1.1 Document D1 discloses a spiral-link belt ("Förderband" (1)), comprising:
a belt body formed of a series of cross-machine direction (CD) ("quer zur Förderrichtung P") spiral coils ("Drahtwendeln" (3)) linked by pintles ("Verbindungstäbe", "Verbindungsglieder", "Verbindungsdrähte" (4)) in the CD to form an endless loop; and
a plurality of CD drive bars ("Mitnehmerrippen" (2)) integrated into said belt body;
wherein each CD drive bar is formed of a first spiral coil ("Drahtwendel" (5)) attached to a second spiral coil ("Drahtwendel" (3)) in the belt body and a third spiral coil ("Drahtwendel" (5)) attached to a fourth spiral coil ("Drahtwendel" (3)) in the belt body; the first and third spiral coils ("Drahtwendeln" (5)) being linked together out of the plane of the belt body (column 3, lines 14-31; claims 1, 3; figures 5-8).

Therefore, all features of claim 1 are disclosed for the belt of D1 and, hence, its subject-matter lacks novelty over D1 (Article 54(1) EPC).

1.2 The Board is of the opinion that the expression "linked together" used in claim 1 leaves open how the first and third spiral coils are to be connected. As exemplified for instance by figure 3 of the application, the connection can be performed via other spiral coils, two in that case, so the connection does not need to be direct.
Contrary to the appellant's opinion, claim 1 cannot be regarded as being limited to the embodiments of the description (first and third coils attached to each other using one pintle as in figure 2 or using only two additional spiral coils as in figure 3). Indeed, as a general principle, when performing substantive examination, the terms used in the claims are considered with their broadest meaning in accordance with the understanding of the person skilled in the art; the specific embodiments discussed in the description not necessarily being foreseen to limit the claims. Therefore, the applicant's arguments with respect to the scope of claim 1 being limited by the two embodiments of the description in application of Article 69 EPC and its protocol are not convincing.

Consequently, the embodiments of D1 in which the connection of the first and third spiral coils is performed via three (figures 5-6) or four (figures 7-8) additional spiral coils fall completely within the terminology of claim 1 of the main request.

1.3 Contrary to the appellant's statements, the Board has never expressed the opinion that the expression "linked together" is ambiguous or unclear. The Board merely considers the expression as being broad such that, as discussed under point 1.2 above, it encompasses other options, including the disclosure of D1.

Furthermore, in case of an ambiguity or a lack of clarity resulting from an expression in a claim, in examination proceedings this issue has to be raised and solved before grant entirely under the provision of...
Article 84 EPC. The scope of protection conferred by a patent is indeed determined by the claims and, hence, the latter should be clear when the patent is proposed for grant. This is all the more true since lack of clarity is not a ground of opposition. Consequently, if the expression "linked together" would have been regarded by the Board as being ambiguous, as suggested by the appellant, claim 1 would in any case have had to be amended for clarification in order to fulfil the requirements of Article 84 EPC.

This alleged objection of ambiguity has not been raised, neither in the impugned decision, nor by the Board, which has instead chosen to interpret the expression in its broadest normal meaning, as would the skilled person do.

1.4 All the decisions cited by the appellant with respect to the application of Article 69(1) EPC relate to opposition proceedings dealing with lack of clarity objections and/or different interpretations of feature(s) by the parties (T 488/97, point 2.2.1; T 23/86, point 2; T 16/87, point 6; T 476/89, point 2). In such cases, the Board agrees that it may indeed be necessary to use the description and/or drawings for determining what is the subject-matter claimed, so that substantive comparison with the prior art can follow. This, however, does not apply to the present examination case.

As a consequence, contrary to the appellant's opinion, the criteria established by Article 69 EPC and its protocol and applied by a national court in litigation
cases do not apply to substantive examination before grant.

2. First auxiliary request

2.1 Since the Board considers that the subject-matter of independent claim 1 of the first auxiliary request lacks novelty over D1 (see below), there is no need to discuss in this decision whether the requirements of Articles 84 and 123(2) EPC are fulfilled.

2.2 Compared with claim 1 of the main request, the following features a) and b) are added to claim 1:

The first (204) and third (206) spiral coils are linked together out of the plane of the belt body
a) either by means of one pintle (205)

b) or by means of a fifth (309) and a sixth (310) spiral coil, one end of the fifth spiral coil (309) being attached to one end of the first spiral coil (304) and one end of the sixth spiral coil (310) being attached to one end of the third spiral coil (306), the other end of said fifth (309) and sixth (310) spiral coil being attached together out of the plane of the belt body using one pintle (305).

Claim 1 of the auxiliary request consists therefore of only two alternatives: a drive bar made up of two spiral coils (feature a)) and another one of four spiral coils (feature b)).

2.3 Contrary to the appellant's analysis, the disclosure of D1 is not restricted to its preferred embodiments, i.e.
tunnel-shaped drive bars with five or six spiral coils (figures 5-8). Indeed, D1 discloses that the drive bars are made up of at least one spiral coil and, in case of tunnel-shaped drive bars, of "several" spiral coils ("mehrere Drahtwendeln"), i.e. more than one spiral coil (column 1, lines 17-20 and lines 35-43; claims 1, 3). Therefore, the two alternatives of claim 1 of the auxiliary request are regarded as being a selection from the tunnel-shaped drive bars comprising a plurality of coils as known from D1.

As a result, although contested by the appellant, all the criteria of a selection invention have to be fulfilled by the selection of either two or four coils in the drive bar.

2.4 The Board holds the view that the drive bar with five spiral coils of D1 (figures 5-6) is close to the selected number of four spiral coils of claim 1 (feature b), so that the criterion that the number selected is sufficiently far removed from any known number in D1, is not fulfilled. Therefore, the selection is not novel.

As a result, taking into consideration also the disclosure of D1 discussed under point 1.1 above, the subject-matter of claim 1 of the first auxiliary request lacks novelty over D1 (Article 54(1) EPC).

2.5 The applicant considers that claim 1 is specific since it encompasses only two alternatives while the disclosure of D1 is generic comprising an indefinite number of alternatives ("more than one spiral coil", "several spiral coils"; claims 1 and 3). Therefore,
since a generic disclosure cannot anticipate a specific disclosure, novelty should be acknowledged.

2.6 The Board cannot share the appellant's view since the above disclosure in D1 is to be seen as a range of values for the number of coils in the drive bar, in particular because the drive bars can only involve a whole number of coils. Claim 1 performs a selection within this disclosed range. The criteria for a selection invention have, hence, to be applied so that the Guidelines G-VI, 5 and T 625/91 (generic versus specific) cited by the appellant are not relevant in the present case.

2.7 The applicant further argues that all the embodiments according to the invention of D1 comprise one or more stiffening rods (7, 7a) as shown in figures 4, 5 and 7. Therefore, the skilled reader of D1 would realize that the invention disclosed does not work without such stiffening rods and would consider the belt of D1 as mandatorily comprising these stiffening rods, which is contrary to claim 1. Therefore, D1 is pointing in a direction different from the invention, where no stiffening rods are claimed (T 176/89, point 10.4). As a result, the absence of stiffening rods in the belt is a further distinguishing feature of claim 1 so that the claimed belt cannot be regarded as a mere selection from the belts of D1.

The Board cannot share the appellant's view since stiffening rods are not excluded from the belt of claim 1. They are even considered as an optional feature in dependent claims 3-5 of the first auxiliary
request. Their not being mentioned in claim 1 can therefore not be regarded as a distinguishing feature.

Moreover, all the embodiments according to the invention involve stiffening rods (see page 5, lines 15-17; page 6, lines 4-7; inserts 208, 308 in figures 2 and 3). The Board agrees with the appellant that the insert(s) are indeed optional in the embodiments due to the fact that they "may" be placed. This is, however, exactly the same for D1 which mentions that the stiffening rods are not necessary (column 3, lines 42-44). Further, the corresponding feature(s) is not part of claim 1, but only of dependent claim 2. There is, hence, no basis to assume that the skilled reader would consider the disclosure of D1 to be different from the present application with respect to the presence or absence of stiffening rod(s)/insert(s).

3. Second auxiliary request

3.1 Since the Board considers that the subject-matter of independent claim 1 of the second auxiliary request lacks novelty over D1 (see below), there is no need to discuss in this decision whether the requirements of Articles 84 and 123(2) EPC are fulfilled.

3.2 Compared with claim 1 of the main request, the following feature is added to claim 1:

c) the spiral-link belt is suitable for being used as a conveyor belt and as a cogged belt
3.3 The belt of D1 is disclosed for being used as a conveyor belt so that this known belt is unambiguously suitable for that use (column 1, line 3; claim 1; figure 1).

The Board agrees with the appellant that D1 does not mention that the belt can be used as a cogged belt. However, the Board is of the opinion that the belt of D1 is technically suitable for that use. Indeed, once reversed with the drive bars on the machine side, which is also not excluded by claim 1, the endless belt of figure 1 of D1 with its drive bars (2), more in particular with the configuration with five coils as shown in figure 5, is suitable for being used as a cogged belt. The rounded outer shape of the drive bar makes it perfectly suitable to enter, as a cog, in the sprocket holes of a belt wheel as shown in figure 7B of the present application.

Therefore, the added feature c) cannot distinguish the claimed subject-matter from the belt of D1.

As a result, taking also into consideration the disclosure of D1 discussed under point 1.1 above, the subject-matter of claim 1 of the second auxiliary request lacks novelty over D1 (Article 54(1) EPC).

3.4 The example mentioned by the appellant of a "hook for fishing" and "hook for a crane" does not apply in the present case since both the application and D1 relate to belts. Indeed, the skilled person would not see technical differences between the known and the claimed belt in terms of, for instance, size or mechanical
strength as he would immediately do when confronted with the example cited.

Furthermore, as pointed out by the Board during the oral proceedings, the claimed subject-matter is a product as such, not a use. Hence, the issue is not whether the skilled person "would" or "could" use the disclosed belt as a cogged conveyor, but rather what are the structural features implied as present in the claimed product by the fact that it has to be "suitable for" that use. Since the appellant has not been able to identify any which are not disclosed in D1, novelty cannot be acknowledged.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: G. Nachtigall

The Chairman: H. Meinders