

Europäisches **Patentamt**

European **Patent Office**

Office européen des brevets

Beschwerdekammern

Boards of Appeal

Chambres de recours

Case Number: T 0791/99 - 3.2.3

DECISION of 8 October 2001 correcting an error in the decision of the Technical Board of Appeal 3.2.3 of 4 September 2001

Appellant:

Albany International Corp

Albany

New York 12201 (US)

Representative:

Giver Sören Bo Awapatent AB P.O. Box 5117 20071 Malmö (SE)

Decision under appeal:

Decision of the Examining Division 2.3.07.085 of the European Patent Office posted 26 March 1999 refusing European patent application No. 97 110 099.5 pursuant to Article 97(1) EPC.

Composition of the Board:

Chairman: Members:

C. T. Wilson F. Brösamle

J.-P. Seitz

In application of Rule 89 EPC the decision given on 4 September 2001 is hereby corrected as follows:

In the order the reference to "3 drawings sheets with Figures 1 to 6 as originally filed" is replaced by "3 drawing sheets with Figures 1 to 4 as originally filed".

The Registrar:

The Chairman:

A. Counillon

C. T. Wilson

BESCHWERDEKAMMERN BOARDS OF APPEAL OF PATENTAMTS

DES EUROPÄISCHEN THE EUROPEAN PATENT OFFICE

CHAMBRES DE RECOURS DE L'OFFICE EUROPEEN DES BREVETS

Internal distribution code:

(A) [] Publication in OJ (B) [] To Chairmen and Members

(C) [X] To Chairmen

DECISION of 4 September 2001

Case Number:

T 0791/99 - 3.2.3

Application Number:

97110099.5

Publication Number:

0815948

IPC:

B05C 1/14

Language of the proceedings: EN

Title of invention:

A coater belt and a coating station for a paper machine

Applicant:

Albany International Corp

Opponent:

Headword:

Relevant legal provisions:

EPC Art. 56

Keyword:

"Inventive step - known element - new purpose"

Decisions cited:

Catchword:

EPA Form 3030 10.93



Europäisches **Patentamt**

European **Patent Office** Office européen des brevets

Beschwerdekammern

Boards of Appeal

Chambres de recours

Case Number: T 0791/99 - 3.2.3

DECISION of the Technical Board of Appeal 3.2.3 of 4 September 2001

Appellant:

Albany International Corp

Albany

New York 12201 (US)

Representative:

Giver Sören Bo Awapatent AB P.O. Box 5117 20071 Malmö (SE)

Decision under appeal:

Decision of the Examining Division 2.3.07.085 of the European Patent Office posted 26 March 1999

refusing European patent application No. 97 110 099.5 pursuant to Article 97(1) EPC.

Composition of the Board:

Chairman:

C. T. Wilson

Members: F. Brösamle

J.-P. Seitz

Summary of Facts and Submissions

I. With decision of 26 March 1999 the examining division refused European patent application No. 97 110 099.5 in the light of

(D1) EP-A-0 576 115

for reasons of Article 56 EPC.

- II. Claim 1 underlying the above decision reads as follows:
 - Use of a specific belt (12) as a coater belt in a coating station (1) for a paper machine, in which said coater belt (12) carries and supports a web (W) to be coated through the coating station (1), said coating station comprising a coating unit (6) for applying a coating material on a surface of the web (W) facing away from the coater belt, without any substantial external compressive pressure being present in the coating station (1) between the supporting belt and the web (W) supported thereby during its path through the coating station (1), wherein as said coater belt use is being made of a belt (12) comprising an endless base member (13) and at least a first surface layer (18), which is arranged on the base member (13) on a side thereof facing the web (W) and which defines a web-contact surface (20); wherein

said surface layer (18) is an impermeable coating comprising a first material and a particulate filler material (19) distributed in said first material;

particles of the particulate filler material (19) which are present in the web-contact surface (20) provide a well-defined roughness on micro-scale of said web-contact surface, corresponding to the size and axial dimensions of said particles, for promoting a release of the web (W) from the coater belt (12) at an exit side of the coating station (1);

the web-contact surface (20) further presents a well-defined smoothness on macro-scale for preventing marking of the web (W); and

the web-contact surface (20) further presents a well-defined surface energy for accomplishing an adhesion to the web (W) for picking-up the web (W) at an entrance side of the coating station (1) and for holding the web (W) against the coater belt (12) during its path through the coating station (1)."

III. Against the above decision of the examining division the applicant - appellant in the following - lodged an appeal on 19 May 1999 paying the appeal fee on the same day and filing the statement of grounds of appeal on 23 July 1999.

The appellant requested to set aside the impugned decision and to grant a patent on the basis of the use claim (claim 1) filed with its letter of 15 September 1998.

- IV. The arguments submitted can be summarized essentially as follows:
 - the only claim is a use claim so that it has to be assessed whether or not the use of a specific belt is patentable;

- the belt used according to the single claim is not subject to the press forces as in (D1) and not to a wet environment on the entrance and exit side of the belt;
- the specific belt used in a coating station for a paper machine as claimed has a different function or operation since in (D1) a dynamic movement of the particles in the belt surface is involved contrary to the circumstances in a coating machine; in addition the belt has not to split up a water film between the web and the belt;
- in (D1) the technical effects of compression of the belt/a dynamic movement of the particles as a consequence of the compression/splitting up of a water film due to said dynamic movement of particles prevail instead of the lower pressures used in a coating machine under essentially dry conditions of the web;
 - a paper machine as in (D1) is therefore not a realistic starting point for the achievement of the subject-matter of the claim and the problem-solution-approach may lead to an unrealistic problem to be solved by the invention and to wrong findings with respect to the crucial issue of inventive step.

. . . / . . .

Reasons for the Decision

- The appeal is admissible.
- 2. Amendments
- 2.1 The use of a specific belt as a coater belt in a coating station for a paper machine can be seen from claim 1 according to EP-A1-0 815 948, page 6, line 39.
- The remaining features of the single claim can be seen from originally filed claims 11 and 1, the latter claim disclosing inter alia a web-contact surface "corresponding to the size and axial dimensions of said particles, for promoting a release of the web (W) from the coater belt (12) at an exit side of the coating station (1)".
- 2.3 The single claim is therefore not open to an objection under Article 123(2) EPC.
- 3. Novelty

The issue of novelty needs no detailed discussion since it was not disputed in the impugned decision and since the board is in agreement with the findings of the examining division in this respect.

- 4. Inventive step
- 4.1 The single claim of appellant's request to grant a patent relates to the use of a specific belt in a coating station for a paper machine and it has therefore to be decided whether or not it was obvious to use the belt known from (D1) as a coater belt in a coating station.

- 4.2 Not knowing the claimed invention a skilled person prima facie would study the environment and the function of the belt according to (D1).
- 4.3 The skilled person would immediately become aware that belt "4, 20, 43" according to Figures 1 to 3 is primarily a transport belt working in a wet environment since the paper web "1, 21, 40" of (D1) is wet; (D1) aims therefore at removing water from the wet paper, see for instance press roll "7" in Figure 1 and page 8, lines 30 to 32, of (D1).
- As a consequence of the dewatering action of the known belt specific press forces have to be applied which press forces are remarkably higher than in a coating station, (see EP-A-0 815 948, page 3, lines 22 to 27).
- 4.5 Linked to the higher press forces in (D1) is a different function or operation of the belt since in (D1) a dynamic movement of the particles in the belt surface is involved which leads to the steps represented in Figures 5A to 5D of (D1), namely water droplets "94" held in valleys "92" thereafter build-up of an uninterrupted water film "100" which finally is split up into droplets "102" and "94".
- 4.6 It is obvious that the above steps are directly linked to a wet substrate which is, however, not existent in this form in the present patent application being based on coating of an essentially dry web and requiring a treatment quite different from the web-treatment according to (D1).
- 4.7 Summarizing, neither the starting substrate nor the purpose, drying in (D1) and coating according to EP-A1-0 851 948, are identical so that a skilled person could not directly consider to use the known belt in a

different environment nor for the solution of a different problem. Since in (D1) no hint to coating of a paper web is derivable a skilled person would have to depart from the teaching of (D1) in order to make use of a known belt for the purpose laid down in the single claim. Under these circumstances it has not to be decided whether or not a prejudice against the claimed use can be derived from (D1) since the use itself is based on an inventive endeavour of a skilled person.

- 4.8 The board is in agreement with the appellant that in the present case the so-called problem-solution-approach can be problematic. However, whether the man skilled in the art starts from the transfer belt of (D1) as nearest prior art, or in the opinion of the board more correctly from a known coating station in a paper machine, the result is the same, no indication being found that the qualities which make the belt known from (D1) suitable for cooperating with a nip roll forming a smooth surface and a thin (almost) continuous water film to hold the sheet to the belt, would make it suitable for use without a nip roll in a dry environment.
- 4.9 The above considerations in this respect result in the findings that the claimed subject-matter is novel and inventive so that the single claim on file is allowable and can form the basis for grant.

Order

For these reasons it is decided that:

- 1. The decision under appeal is set aside.
- The case is remitted to the first instance with the order to grant a patent on the following basis:
 - claim 1 filed with letter of 15 September 1998;
 - description: pages 1 to 12 filed with letter of 14 August 2001;
 - 3 drawing sheets with Figures 1 to 6 as originally filed.

The Registrar:

The Chairman:

A. Counillon

Scimiller

C. T. Wilson

AS

2010.D

Br