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**D E C I S I O N**  
**of 4 June 2003**

**Case Number:** T 0171/01 - 3.2.7

**Application Number:** 95916642.2

**Publication Number:** 0755355

**IPC:** B65G 47/50

**Language of the proceedings:** EN

**Title of invention:**

Sorting installation for sorting individually conveyed objects

**Patentee:**

MTS MODULARE TRANSPORT SYSTEME GmbH

**Opponent:**

WF Logistik GmbH

**Headword:**

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**Relevant legal provisions:**

EPC Art. 56

**Keyword:**

"Inventive step (yes)"

**Decisions cited:**

-

**Catchword:**

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Boards of Appeal

Chambres de recours

Case Number: T 0171/01 - 3.2.7

**D E C I S I O N**  
**of the Technical Board of Appeal 3.2.7**  
**of 4 June 2003**

**Appellant:** MTS MODULARE TRANSPORT SYSTEME GmbH  
(Proprietor of the patent) Fiecht Au 15  
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**Representative:** Viering, Jentschura & Partner  
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**Respondent:** WF Logistik GmbH  
(Opponent) Justus-von-Liebig-Str. 12  
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**Representative:** Herzog, Markus, Dipl.-Phys. Dr.  
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**Decision under appeal:** Decision of the Opposition Division of the  
European Patent Office posted 4 December 2000  
revoking European patent No. 0 755 355 pursuant  
to Article 102(1) EPC.

**Composition of the Board:**

**Chairman:** A. Burkhart  
**Members:** K. Poalas  
E. Lachacinski

## Summary of Facts and Submissions

- I. The appellant (patent proprietor) lodged an appeal against the decision of the Opposition Division revoking the European patent No. 0 755 355.

Opposition was filed against the patent as a whole based on Article 100(a) EPC (lack of inventive step) and Article 100(b) EPC (lack of enabling disclosure).

The Opposition Division found that the subject-matter of claim 1 as granted lacked an inventive step and revoked the patent.

The Opposition Division argued that in view of the combination of the teachings of the documents

E1: DE 37 01 931 C,

E2: DE 42 26 066 A and

E4: FR 2 577 500 A

the subject-matter of claim 1 as granted did not involve an inventive step.

- II. The appellant requested that the decision under appeal be set aside and the patent be maintained as granted. As an auxiliary request the appellant requested the maintenance of the patent on the basis of claim 1 as filed on 9 April 2001. Oral proceedings were also requested as an auxiliary request.
- III. The respondent with the fax received on 19 May 2003 withdrew the opposition filed against the patent in

suit.

V. Independent claim 1 as granted reads as follows:

"A suspension conveyor comprising:  
two conveyor circuits (1, 2) driven to circulate in opposite directions, the two conveyor circuits (1, 2) being arranged as a conveyor circuit pair on opposite sides of an additional conveyor path (4);  
roller devices (10) adapted to be pushed or pulled by the conveyor circuits (1, 2), for carrying objects (a, b, ..., n); and  
a controllable switching means (3) arranged between the conveyor circuits (1, 2), for transferring the objects individually from one of the conveyor circuits to the other conveyor circuit, said switching means being adapted to transfer the objects selectively from the conveyor path (4) to either of the conveyor circuits (1, 2) and from either of the conveyor circuits (1, 2) to the conveyor path (4);  
characterised in that  
the suspension conveyor is a sorting installation for sorting numerous different individually conveyed objects (a,b,....n) sorted in the sorting installation in a speedy manner;  
the conveyor circuits (1, 2) and the additional conveyor path (4) extend within one plane;  
said additional conveyor path (4) forming part of both conveyor circuits (1, 2) over at least an infinitesimal path portion at the place of the switching means (3) and extends over said at least infinitesimal path portion in the same direction as the conveyor circuits (1, 2); and  
that the switching means (3) is further adapted to selectively allow the objects to travel past the

switching means without leaving the respective conveyor circuit (1, 2) in which the objects are present."

VI. The Appellant argued essentially as follows:

The skilled person intending to improve the suspension conveyor known from document E2 so that the sorting process is carried out in a speedy manner gets no indication either from document E1 or from document E4, none of these documents being directed to the problem of increasing the sorting speed, for arranging a conveyor circuit pair on opposite sides of an additional conveyor path, said additional conveyor path forming part of both conveyor circuits over at least an infinitesimal path portion at the place of the switching means and extending over said at least infinitesimal path portion in the same direction as the conveyor circuits.

Therefore, the subject-matter of independent claim 1 involves an inventive step in the sense of Article 56 EPC.

## **Reasons for the Decision**

1. Inventive step (Article 56 EPC)

1.1 Closest prior art

The most relevant prior art is described in document E2. Document E2 (see figure) describes a suspension conveyor being a sorting installation using two conveyor circuits 2, 3 positioned at only one side of an additional conveyor path 4 and is directed to the

same problem as the one in the patent in suit (see document E2, column 1, lines 45 to 48).

1.2 Problem underlying the invention

The problem underlying the invention of the patent in suit is to improve the suspension conveyor known from document E2 so that even the sorting of numerous different objects conveyed in the sorting installation can be carried out in a speedy manner (see patent in suit, column 1, lines 47 to 51).

1.3 Solution

The above-mentioned problem is solved according to claim 1 in that the two conveyor circuits are arranged as a conveyor circuit pair on opposite sides of the additional conveyor path, and in that said additional conveyor path forms part of both conveyor circuits over at least an infinitesimal path portion at the place of the switching means and extends over said at least infinitesimal path portion in the same direction as the conveyor circuits.

1.4 This solution is not rendered obvious to the person skilled in the art by the documents under consideration for the following reasons:

Document E1 (see Figures 1 and 2) describes a suspension conveyor having two conveyor circuits 16 and 32 positioned in the neighbourhood of working stations 33 and on opposite sides of a main conveyor 10, 12. A conveyor path portion (switch segment) 24 is movable between one position being in line with the main conveyor 10, 12 and two positions being in line with

one of the two conveyor circuits 16 and 32, respectively. Upon operating the switch segment 24 the roller devices 14 carrying objects (clothes 46) fall downwards along a bar 28 towards a stop 38, where several clothes are lined up waiting to be treated at the working station 33. The clothes are then worked on by the operator of the working station 33 and are transported upwardly back to the main conveyor 10, 12 via the driven suspension conveyor belt 54. Therefore, the feature of claim 1 of the patent in suit that the "additional conveyor path forms part of both conveyor circuits over at least an infinitesimal path portion at the place of the switching means and extends over said at least infinitesimal path portion in the same direction as the conveyor circuits" is not disclosed in document E1.

Furthermore, document E1 (see column 1, lines 45 to 52) is directed to a problem different to the one of the patent in suit, namely to the control of the entrance and the exit of the conveyor circuits 16, 32 using only one sensor. In document E1 it is the operator of the working station 33 who imposes the transporting sequence of the conveyor belt 54 for the outgoing roller devices 14.

Document E4 (see Figure 4) describes a conveyor system having switching means for distributing objects from a main conveyor into two conveyor circuits connected with working stations. The object of document E4 is to provide a conveyor system which is adaptable to different working stations and which allows to send the objects from one working station directly to another working station without running through the whole main conveyor.

None of the documents E1 and E4 is directed to a sorting installation and to the problem underlying the invention of the patent in suit. Therefore, the skilled person intending to increase the sorting speed of the sorting installation of document E2 gets no indication from documents E1 and E4 as to how to achieve this objective.

1.5 For the above-mentioned reasons, the subject-matter of claim 1 of the patent in suit involves an inventive step within the meaning of Article 56 EPC.

1.6 The same applies to the subject-matter of claims 2 to 7 which are dependant on claim 1.

## **Order**

### **For these reasons it is decided that:**

1. The decision under appeal is set aside.
2. The patent is maintained unamended.

The Registrar:

The Chairman:

D. Spigarelli

A. Burkhart