Case Number: T 1123/98 - 3.2.6
Application Number: 90305139.9
Publication Number: 0398603
IPC: B26D 7/32
Language of the proceedings: EN
Title of invention: Combined jump conveyor and slicing machine
Patentee: THURNE ENGINEERING CO LTD
Opponent: Firma Weber Maschinenbau GmbH
Headword: 
Relevant legal provisions: EPC Art. 54(2), 56
Keyword: "Novelty (yes)"
"Inventive step (yes)"
Decisions cited: 
Catchword: 

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DEcision
of the Technical Board of Appeal 3.2.6
of 6 November 2001

Appellant: Firma Weber Maschinenbau GmbH
(Opponent)
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Respondent: THURNE ENGINEERING CO LTD
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Decision under appeal: Decision of the Opposition Division of the European Patent Office posted 9 October 1998 rejecting the opposition filed against European patent No. 0 398 603 pursuant to Article 102(2) EPC.

Composition of the Board:
Chairman: P. Alting van Geusau
Members: G. Pricolo
M. Tardo-Dino
Summary of Facts and Submissions

I. The mention of the grant of European patent No. 0 398 603 in respect of European patent application No. 90305139.9 filed on 14 May 1990 was published on 20 July 1994.

II. Claim 1 as granted reads as follows:

"A combined jump conveyor and slicing machine including a jump conveyor formed by a first short conveyor (1) adjacent the slicing blade (3) of the slicing machine and a second conveyor (2) downstream of the first conveyor (1), both conveyors (1,2) of the jump conveyor having an independent drive (7,8) and control means (9) to drive the two conveyors at the same speed or at different speeds, characterized by the first short conveyor (1) having a length substantially equal to the height capacity of the slicing machine such that only a part of a shingled group of slices cut by the slicing blade (3) is on the first short conveyor (1) at any one time, the independent drive (7) and control means (9) of the first conveyor (1) also enabling it to be driven at high speeds in the reverse direction away from the second conveyor (2) to reject slices cut by the slicing blade (3)".

Claim 8 as granted relates to a "method for producing shingled group of slices using the apparatus according to any of the preceding claims ...".

III. Notice of opposition was filed against the patent as a whole by the appellant (opponent), based on Article 100(a) EPC in conjunction with Articles 52(1), 54 and 56 EPC. The appellant essentially relied on the
prior art disclosed in


and on the prior use of a machine CCS 7000/CCU 150 made by Weber Maschinenbau GmbH. In support of this alleged prior use, the appellant filed the following evidence:

MF1: copy of invoice to Karl Könecke GmbH & Co. KG and copy of technical description;

MF2: copy of invoices to Westfalenkrone, Neumeyer AG and Gebrüder Kunz, Paul Kreter and Aldenhoven & Co., Franz Gramiller & Sohn and Franz Radatz, and copy of technical description;

MF2a: page 3 of the technical description of MF2;

MF3: technical drawing;

MF4: declaration under oath of Mr. Horst Heinze, dated 4 February 1996;

MF5: declaration under oath of Mr. Horst Heinze, dated 4 February 1999, filed during the appeal proceedings;

The respondent (patentee) also filed evidence relating to the alleged prior use, namely:


IV. By decision posted on 9 October 1998 the Opposition
Division rejected the opposition. The Opposition Division held that the subject-matter of the granted claims was novel and involved an inventive step.

V. The appellant lodged an appeal, received at the EPO on 7 December 1998, against that decision. The appeal fee was paid simultaneously with the filing of the appeal. The statement setting out the grounds of appeal was received at the EPO on 5 February 1999.

VI. Oral proceedings took place on 6 November 2001.

The appellant requested that the decision under appeal be set aside and that the patent be revoked.

The respondent requested that the appeal be dismissed and that the patent be maintained as granted.

VII. In support of its requests the appellant relied essentially on the following submissions.

Claim 1 only required that the independent drive and control means of the first conveyor provided the possibility that the first conveyor be driven in reverse direction and not that said independent drive and control means were actually "adapted to" drive the first conveyor in reverse direction. Since firstly the prior used apparatus comprised all the structural features of the combined jump conveyor and slicing machine in accordance with claim 1, and secondly the prior used apparatus could have been programmed to drive the first conveyor in reverse direction to reject slices cut by the slicing blade, the subject-matter of claim 1 lacked novelty.
Claim 8 stated that "the apparatus according to any of the preceding claims" was used, but did not require the step of driving the first conveyor in reverse direction. Since the prior used apparatus was programmed to carry out a method in accordance with claim 8, the latter was automatically put into practice when the prior used apparatus was in operation. Therefore, also the subject-matter of claim 8 lacked novelty.

If claim 1 were interpreted as defining that the independent drive and control means of the first conveyor were adapted to drive it at high speeds in the reverse direction, then its subject-matter was novel, since the prior used apparatus was not provided with a computer program for this purpose. However, it did not involve an inventive step. Indeed the skilled person, being an engineer with knowledge of computer controlled machines, would have carried out investigations on the prior used apparatus to explore what further functions were made possible by the independent drive and computer control means, and would have readily appreciated that, since all the necessary structural features were present, a reverse drive function was possible. The skilled person would also have readily recognized that such a function allowed rejection of unacceptable slices in a simple manner. That this realisation was an obvious one was moreover apparent from the fact that it was even made by the clients that bought the prior used apparatus, albeit after the relevant date of the patent in suit.

VIII. The respondent disputed the views of the appellant. His arguments can be summarized as follows.
It was not contested that a prior use of an apparatus CCS 7000/CCU 150, comprising two conveyors having independent drives and control means, took place. The definition of claim 1, however, required the presence of every technical feature necessary for performing the functions referred to in claim 1, in particular the presence of a program for the control means enabling it to drive the first conveyor at high speeds in the reverse direction away from the second conveyor. Since the prior used apparatus was not provided with such program, the subject-matter of claim 1 was novel.

Moreover, there was no evidence that the prior used apparatus was provided with means for forming shingled groups of slices.

The subject-matter of claim 1 also involved an inventive step because the prior art did not provide the skilled person with any incentive to operate the first conveyor in the reverse direction. Operating the first conveyor in this manner was moreover inconceivable when looking at the prior used apparatus. Indeed, if slices were rejected in the reverse direction, then they would interfere with the slicing blade.

**Reasons for the Decision**

1. The appeal is admissible.

2. **Novelty**

   2.1 Prior use
2.1.1 Since the public character of the prior use of the machine CCS 7000/CCU 150 made by Weber Maschinenbau GmbH is not disputed by the respondent, and the Board sees no reason to doubt that this requirement is fulfilled, the prior use forms part of the state of the art in accordance with Article 54(2) EPC.

2.1.2 When compared to the claimed subject-matter, the prior used object consists of a combined jump conveyor and slicing machine (see drawing MF3), including a jump conveyor formed by a first short conveyor (1) adjacent the slicing blade (3) of the slicing machine and a second conveyor (2) downstream of the first conveyor (see declaration MF4, first page, 3rd paragraph), both conveyors (1 and 2) of the jump conveyor having an independent drive and control means to drive the two conveyors at the same speed or at different speeds (see declaration MF4, first page, 3rd paragraph and second page, first paragraph).

Moreover, the first short conveyor has a length substantially equal to the height capacity of the slicing machine (see drawing MF3; declaration MF4, last paragraph of the first page and first paragraph of the second page), and the prior used object is programmed to form shingled groups of slices (see declaration MF4, page 2). If the prior used object is operated according to the program and if a product log having a height corresponding to the height capacity of the slicing machine is selected by the operator, then necessarily only a part of a shingled group of slices cut by the slicing blade will be on the first short conveyor at any one time. Thus, the prior used object comprises all the necessary features for performing the latter function.
2.1.3 In the Board's view, the definition of claim 1: "the independent drive and control means of the first conveyor also enabling it to be driven at high speeds in the reverse direction away from the second conveyor to reject slices cut by the slicing blade" can only be understood as requiring the presence of all technical features necessary for performing the technical functions defined therein, and therefore, also the presence of a suitable means which is effective to drive the first conveyor in the reverse direction, such as a software (program). Such software must be regarded as a technical feature since it produces a technical effect. The prior used object is not provided with a suitable program to perform the technical function of driving the first conveyor in the reverse direction, and consequently, it does not have all the technical features required by the definition of claim 1.

2.2 Document D1

Document D1 is cited in the patent in suit, and discloses a combined jump conveyor and slicing machine according to the preamble of claim 1. It further discloses (see column 3, lines 14 to 19) that the speed of the motor 13, which drives the first conveyor 10, is controlled by a potentiometer. A potentiometer alone is however not suitable for reversing the speed of a motor. Accordingly, this document does not disclose that the independent drive and control means of the first conveyor enable it to be driven in the reverse direction away from the second conveyor.

2.3 There is no need to consider the other available documents which were no longer relied upon by the appellant in the appeal proceedings, since these
documents are clearly less relevant than the material discussed above. Therefore, the subject-matter of claim 1 is deemed to be novel over the cited prior art.

3. **Inventive step**

3.1 The prior used machine CCS 7000/CCU 150 is considered to represent the closest prior art.

3.2 Since the patent describes the effects obtained by the claimed combined jump conveyor and slicing machine over the prior art in accordance with D1, which is less relevant than the prior used object, an inquiry must be made as to which technical problem objectively existed when starting from the prior used object as the closest prior art.

The technical effect of the distinguishing feature, i.e. that the independent drive and control means of the first conveyor also enable it to be driven at high speeds in the reverse direction away from the second conveyor to reject slices cut by the slicing blade, is that unwanted slices cut by the slicing blade can be rejected.

The technical problem solved by the claimed subject-matter can therefore be regarded as providing means for further improving the functioning of the combined conveyor and slicing machine.

3.3 The prior art neither discloses nor suggests rejection of unwanted slices by driving the conveyor in reverse direction, nor contains any other suggestion to consider reverse movement of the first conveyor. Therefore, the recognition that by driving the first
conveyor at high speeds in the reverse direction rejecting of unwanted slices could be obtained, without disturbing the slicing procedure, must be considered inventive.

The appellant's allegation that the clients that bought the prior used machine wrote to the manufacturer to suggest that reverse movement be included as an option - albeit after the relevant date for the patent in suit so that these suggestions did not belong to the state of the art - is not a valid argument to convince the Board to the contrary. Indeed, it cannot be excluded that the clients acted in knowledge of the claimed invention as has been suggested by the respondent.

3.4 Therefore, the subject-matter of claim 1, and of claim 2 to 7 dependent therefrom, involves an inventive step.

4. Claim 8 relates to a method for producing shingled group of slices using the apparatus according to any of the preceding claims. Since claims 2 to 7 are dependent on claim 1, claim 8 requires that an apparatus having at least the combination of features according to claim 1 is used. This combination of features being both novel and inventive, as explained above, it also follows that the subject-matter of claim 8 is novel and involves an inventive step.

In this context, it is irrelevant that the method of claim 8 does not include the step of driving the first conveyor in reverse direction. What is decisive, is that claim 8 includes the use of an apparatus which is itself novel and inventive.
Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

M. Patin P. Alting van Geusau