Datasheet for the decision
of 12 December 2008

Case Number: T 0632/07 - 3.2.06
Application Number: 02026353.9
Publication Number: 1314803
IPC: D01H 5/82
Language of the proceedings: EN

Title of invention:
Device for detecting looseness in drafting rollers of spinning machine

Patentee:
KABUSHIKI KAISHA TOYOTA JIDOSHOKKI

Opponent:
Oerlikon Textile GmbH & Co. KG

Headword:
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Relevant legal provisions:
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Relevant legal provisions (EPC 1973):
EPC Art. 52(1), 54(1), 56

Keyword:
"Novelty and inventive step - yes"

Decisions cited:
-

Catchword:
-
Case Number: T 0632/07 - 3.2.06

DECISION
of the Technical Board of Appeal 3.2.06
of 12 December 2008

Appellant: Oerlikon Textile GmbH & Co. KG
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Decision under appeal: Decision of the Opposition Division of the European Patent Office posted 27 February 2007 rejecting the opposition filed against European patent No. 1314803 pursuant to Article 102(2) EPC.

Composition of the Board:
Chairman: P. Alting Van Geusau
Members: G. Kadner
W. Sekretaruk
Summary of Facts and Submissions

I. The mention of grant of European patent No. 1 314 803 in respect of European patent application No. 02026353.9 filed on 22 November 2002 and claiming a Japanese priority from 26 November 2001 was published on 11 May 2005 with 8 claims. Claim 1 reads as follows:

"A device for detecting looseness in drafting rollers of a spinning machine equipped with a drafting device (11) which is equipped with a plurality of bottom-rollers (12, 13, 14) consisting of a plurality of roller shafts (21) connected to each other through threaded engagement of screw portions formed at the ends thereof, each bottom roller (12, 13, 14) being divided into two line shafts (12a, 12b, 13a, 13b, 14a, 14b) and arranged coaxially, each line shaft (12a, 12b, 13a, 13b, 14a, 14b) being driven from the end side of a machine base, characterized in that the detecting device comprises detecting means (22a, 22b, 24) for detecting looseness in the roller shafts on the basis of rotation or axial movement of that roller shaft (21) of the plurality of roller shafts (21) constituting the back bottom roller (14) which is situated at the end on the side opposite to the driving side."

II. Notice of opposition was filed against the granted patent in which revocation of the patent on the grounds of Article 100 a) EPC was requested.

By decision posted on 18 January 2007, the Opposition Division rejected the opposition since the subject-matter of claim 1 met the requirements of novelty and
inventive step when compared with the prior art documents:

D2: DE-A-42 11 685
D3: DE-A-28 17 162
D4: CH-A-629 262

III. Notice of appeal was filed against this decision by the Appellant (Opponent) on 17 April 2007 and the appeal fee was paid on the same day. The grounds of appeal were filed on 6 July 2007.

IV. In a communication accompanying the summons to oral proceedings the Board expressed its preliminary view that the Opposition Division's judgment appeared correct. Novelty was not in doubt, and inventive step would have to be discussed in detail during the oral proceedings.

V. With letter received at the EPO on 11 November 2008 the Appellant informed the Board that it would not appear at the oral proceedings, and repeated its request for revocation of the patent.

VI. Oral proceedings were held on 12 December 2008 in which the Appellant was not present as it had announced.

VII. The Appellant had requested in writing that the decision under appeal be set aside and the patent be revoked.

The Respondent (Patentee) requested that the appeal be dismissed.
VIII. In support of its request the Appellant essentially relied upon two lines of attack, presented in the statement of grounds of appeal and in the response dated 10 November 2008, respectively:

D1 represented the most pertinent prior art and disclosed a device in accordance with the preamble of claim 1 of the patent in suit. The object of the alleged invention was to make it possible to detect generation of looseness in the screw portions of the roller shafts. However, using at least one detecting mechanism in drafting rollers of a spinning machine was already known from D1 and it would need no inventive performance to arrange the detecting device consisting of two generally known detecting means at the position which was most appropriate to achieve the desired effect. Insofar also D2, D3 and D4 constituted prior art which would be taken into account by a person of ordinary skills when trying to achieve a solution to the underlying object of the patent in suit.

The claimed solution did not involve an inventive step since it was obvious at least by applying the teachings of D1 to the common prior art as described in the patent in suit. When starting from such a generally known drafting machine having bottom rollers consisting of a plurality of roller shafts connected to each other through threaded engagement of screw portions it was not inventive to apply the teachings disclosed in D1 according to which detecting means were used in order to detect a difference in the rotational speed of the two line shafts. With such an arrangement looseness in drafting rollers could easily be detected, and the
solution to the problem was arrived at without the involvement of an inventive step.

IX. The arguments of the Respondent can be summarized as follows:

The Appellant's argument in respect of a generally known drafting arrangement was not admissible since the features of the pre-characterizing portion of claim 1 were not disclosed in the prior art. Moreover the combination with D1 would not lead to the subject-matter claimed.

D1 did not show a device for detecting looseness in drafting rollers of a spinning machine. It did not disclose a plurality of bottom-rollers consisting of a plurality of roller shafts connected to each other through threaded engagement of screw portions formed at the ends thereof. Also the feature that each bottom roller was divided into two line shafts being driven from the end side of a machine base was not present in that prior art.

Considering the characterizing portion of claim 1, in the arrangement according to D1 the detecting means were not positioned at the end on the side opposite to the driving side of the roller shafts and thus were not suitable for detecting looseness in the drafting rollers. Hence the subject-matter of claim 1 was not arrived at in an obvious manner by combination of the prior art documents.
Reasons for the Decision

1. The appeal is admissible.

2. **Novelty**

In the appeal proceedings no arguments were presented by the Appellant as to why the subject-matter of claim 1 of the patent in suit lacked novelty. The Boards sees no reason why the conclusion of the Opposition division in this respect should not be accepted.

3. **Inventive step**

3.1 Considering the Appellant's line of argument when starting from the assumption that the combination of features included in the pre-characterizing portion of claim 1 was commonly known prior art prior art the Board agrees with the Respondent that it is up to the Appellant to show that the combination of features of the preamble of the claim indeed belongs to the prior art. In this respect the Appellant cannot rely on a mere assumption. In the absence of any objective support for the Appellant's assumption this line of argument is not convincing.

3.2 The line of argument relied upon in the grounds of appeal started from D1 which allegedly represented the closest prior art.

D1 discloses a draft roll driving device in which only the middle bottom roller is divided into two line shafts. However, as the Opposition correctly stated this device is not intended for detecting looseness in drafting
rollers of a spinning machine but for detecting irregularities in the rotational angle of the drafting rollers in order to avoid breakages of the bottom rollers or destruction of the gearing in the driving unit (paragraph 2.4.1.3).

3.3 D1 does not disclose a plurality of bottom-rollers consisting of a plurality of roller shafts connected to each other through threaded engagement of screw portions formed at the ends thereof, each bottom roller being divided into two line shafts and arranged coaxially, each line shaft being driven from the end side of a machine base. Furthermore the detecting means for detecting irregularities on the basis of rotation or axial movement is not situated at the end on the side opposite to the driving side. Since the technical problem described in D1 differs from that underlying the patent in suit, the skilled person has no reason to look for a solution in this prior art document.

3.4 Even if starting from D1 and trying to combine its teachings with those disclosed in D3 the skilled person would not be led to the subject-matter of claim 1. The problem to be solved in D3 is comparable with that of D1, namely to avoid damages of the drafting device caused by the use of gears having incorrect numbers of teeth. That problem only arises due to the rather complicated closed gearing system by which the rotational movement of the bottom rollers is connected together and which is totally different from the drive system for the bottom rollers according to the patent in suit. D3 does not disclose a plurality of bottom-rollers, each bottom roller being divided into two line shafts and arranged coaxially, each line shaft being driven from the end
side of a machine base. Thus, since these features are neither disclosed nor indicated in any of both documents, lack of inventive step can only be reasoned on the basis of inadmissible hindsight.

3.5 The further cited prior documents do not come closer to the claimed solution than the D1 and D3 discussed above.

Hence, in absence of a teaching in the prior art to the combination of features of the device according to claim 1 the subject-matter claimed involves an inventive step. Since the dependent claims 2 to 8 also meet the requirements of the EPC the patent can be maintained as granted.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: 

The Chairman:

M. Patin 

P. Alting van Geusau