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Datasheet for the decision of 20 January 2021

Case Number: T 1432/16 - 3.2.06

Application Number: 12169364.2

Publication Number: 2540879

IPC: D01G21/00, D01G27/00

Language of the proceedings: EN

Title of invention:
Deviation device of webs to a lap winder on a spinning line

Patent Proprietor:
MARZOLI MACHINES TEXTILE S.r.l.

Opponent:
Trützschler GmbH & Co. KG

Headword:

Relevant legal provisions:
EPC Art. 100(a), 54(2), 56

Keyword:
Novelty - (yes)
Inventive step - (yes)

Decisions cited:

Catchword:

Europäisches Patentamt
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Beschwerdekammern

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Case Number: T 1432/16 - 3.2.06

D E C I S I O N
of Technical Board of Appeal 3.2.06
of 20 January 2021

Appellant: (Opponent)	Trützschler GmbH & Co. KG Duvenstrasse 82-92 41199 Mönchengladbach (DE)
Respondent: (Patent Proprietor)	MARZOLI MACHINES TEXTILE S.r.l. Via S. Alberto, 10 25036 Palazzolo sull'Oglio (BS) (IT)
Representative:	Pulieri, Gianluca Antonio Jacobacci & Partners S.p.A. Piazza della Vittoria, 11 25122 Brescia (IT)
Decision under appeal:	**Decision of the Opposition Division of the European Patent Office posted on 21 April 2016 rejecting the opposition filed against European patent No. 2540879 pursuant to Article 101(2) EPC.**

Composition of the Board:

Chairman	T. Rosenblatt
Members:	M. Dorfstätter
	E. Kossonakou

Summary of Facts and Submissions

I. An appeal was filed by the appellant (opponent) against the decision of the opposition division rejecting the opposition against European patent No. 2 540 879.

II. The following documents were referred to by the parties and are relevant to the present decision:

D1 EP 0 679 741 A1
E1 US 1 848 667

III. The Board issued a summons to oral proceedings and a subsequent communication containing its provisional opinion in view of novelty and inventive step of the subject-matter of claim 1.

IV. Oral proceedings by videoconference were held before the Board on 20 January 2021. For details on the discussion, reference is made to the minutes of the oral proceedings.

V. The final requests of the parties were as follows:

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

The respondent requested that the appeal be dismissed (main request), alternatively that the patent be maintained in amended form according to one of auxiliary requests 1 to 6 as filed with the reply to the grounds of appeal.

VI. Claim 1 of the main request reads as follows:

"Lap-winder apparatus (1) for a spinning preparation line, comprising:
- a loading area (4, 6) for the parking of cans (2) suitable to contain a web to be processed;
- a lap-winder (8) positioned so as to receive the webs extracted from the cans, comprising at least one drawing group (12', 12") having a pair of introduction cylinders (14) defining an introduction reference plane (Z) and a drawing head having a predefined working width;
- a deviation device suitable to support and deviate the web contained in the cans from said cans (2) to the drawing group (12', 12"), comprising a final deviator (60), positioned immediately upstream of the drawing group (12', 12"), suitable to perform a deviation of the web, once only, before the pair of introduction cylinders (14), wherein

the final deviator (60) comprises at least one deviation unit (62) suitable to deviate a single web and positioned on the working width of the drawing head, which forms an upper abutment for the deviated web suitable to limit the trajectory of the deviated web above the introduction reference plane (Z)."

VII. The appellant's arguments may be summarised as follows:

The subject-matter of claim 1 lacked novelty over D1. The guide roll 38 as depicted in Figure 6 of D1 could be considered to represent the final deviator. The formulation 'immediately upstream' was directed to the function of deviation. Since there were no parts located between the guide roll 38 and the drawing unit across which the sliver moved, the guide roll 38 was to be seen as being positioned 'immediately upstream' of the drawing unit.

When reading D1, the whole disclosure had to be taken into account. The skilled person understood from column 8 that the guide roll 38 could be omitted, be it in a feeding device according to the claims or according to any embodiment of D1. Having omitted the guide roll 38, the sliver guiding part 15 or the feeding device 14 would represent the final deviator which would then be positioned immediately upstream of the drawing unit.

Alternatively, if D1 were considered not to disclose a final deviator positioned immediately upstream of the drawing group, the skilled person would contemplate shortening the guide plate 39 or omitting it altogether. This would result in lower costs. The objective technical problem was thus to reduce costs. In column 8, D1 suggested to omit the guide roll 38. The skilled person would also understand that the guide plate 39 was then useless and would omit it too.

In an alternative approach, the skilled person would turn to E1, which gave an incentive to substitute the guide roll and the guide plate of D1 by a guide plate as shown and described in E1, as this plate was cheaper to manufacture than a guide roll with its expensive bearings. Neither the guide roll nor the guide plate was claimed in the independent claim of D1. The skilled person understood therefrom that these parts were not essential features of the invention and could be omitted or substituted. When applying the guide plate of E1 the skilled person would use only those parts which were needed. If a check for a broken fibre sliver were not needed, the skilled person would omit those parts related to this function.

VIII. The respondent's arguments may be summarised as follows:

The subject-matter of claim 1 was novel. D1 did not disclose a final deviator positioned immediately upstream of the drawing group. The guide plate 39 clearly lied within the trajectory of the sliver. As the sliver was guided by the plate 39, the roll 38 acting as a final deviator was thus not positioned immediately upstream of the drawing group.

There was also no unambiguous teaching to omit the guide roll and even less the guide plate. The passage in column 8 only referred to the additional guiding function that became superfluous but not the guide roll itself. Likewise there was no motivation for the skilled person to shorten the guide plate 39 or to replace it by a shorter piece.

The skilled person had no motivation to consider the plates of E1 as a means to reduce costs. Additionally, the arrangement of the cans in E1 was entirely different to the one in D1, and still included other parts between the guide plate 19 and the pair of infeed rollers 13. Applying the whole arrangement of the guide plate 19 in the feeding device of figure 6 in D1 did thus not lead to the claimed subject-matter.

Reasons for the Decision

1. *Article 100(a) EPC - Novelty*

The ground for opposition under Article 100(a) EPC in combination with Article 54 EPC does not prejudice

maintenance of the patent as granted. D1 does not deprive the subject-matter of claim 1 of novelty.

The objections of the appellant fail for the reason that D1 does not disclose a 'final deviator, positioned immediately upstream of the drawing group' (emphasis by the Board).

1.1 As was argued by the appellant according to a first line of attack, the guide roll 38 depicted in Figure 6 of D1 and disclosed in col. 7, lines 35-58, as well as in claims 30 or 31 or in column 4, lines 42-49, can indeed be regarded as being a final deviator. This component is, however, not positioned immediately upstream of the drawing group.

The appellant's argument that the formulation 'immediately upstream' was restricted to the function of deviation and the guide roll 38 was thus to be considered as being positioned immediately upstream of the drawing group, is not accepted. Figure 6 as well as the cited passages of the description in column 4, lines 42-47, and column 7, as well as claim 30, disclose the guide roll 38 only in combination with a guide plate 39 downstream of the guide roll, see e.g. claim 30 or column 4, line 44 ('*nachgeschaltet*'). The guide plate 39 serves several purposes. As correctly pointed out by the appellant (albeit in the discussion of inventive step), the guide plate, together with the guide roll 38, has a clamping function (see column 7, lines 49 to 52). However, as its name suggests ('*Leitblech*' in the German original of D1, which the Board translates as 'guide plate'), it is also intended to guide the sliver towards the drawing group, as has been also pointed out by the respondent. In this function, and as is immediately apparent from Figure 6,

it is the guide plate 39 with its lower extension which is positioned immediately upstream of the drawing group and hence not the guide roll 38. Concerning the embodiment defined in claim 31, which does not explicitly mention the downstream guide plate, this is not a direct and unambiguous disclosure of a feeding device in which the guide plate 39 is omitted. Claims 30 and 31 define preferred forms of the feeding device but focus on different components. From the fact that no feature taking over the clamping and guiding function of the guide plate is mentioned, it cannot be deduced that such clamping and guiding is no longer necessary. With no other form of clamping and guiding than the guide plate 39 being derivable from D1 as a whole, the Board concludes that also in the embodiment defined in claim 31 the guide plate 39 or some other form of clamping and guiding means must be present at this position. Claim 31 does hence not disclose, not even implicitly, let alone directly and unambiguously, that the guide roll 38 is positioned immediately upstream of the drawing group.

Also the fact that in the patent, e.g. Figures 3 and 4, the final deviator is installed on a casing, enclosing the drawing group, cannot change the above conclusions. The fibre sliver entering the housing through a large opening therein is not in any way affected (guided or supported, let alone deviated) by the housing. A skilled person would not understand this component or its opening as lying 'immediately upstream' of the drawing group.

1.2 The appellant's alternative line of argument that the skilled person understood from column 8, lines 1-4, that the guide roll 38 could be omitted, is not directly and unambiguously derivable from this passage.

D1 states that it was also conceivable to arrange the feeding device 14 in an inclined way with respect to the vertical direction, such that an additional deviation by the guide roll 38 becomes superfluous (*'Es wäre auch denkbar, die Zuführeinrichtung 14 in vertikaler Richtung schräg anzuordnen, so dass eine zusätzliche Umlenkung durch die Führungsrolle 38 überflüssig wird'*). This means that if the feeding device 14 is suitably arranged in an inclined way, there will be no need for a deviation. The word 'superfluous' thus refers to the deviation and not to the guide roll 38.

Therefore, D1 neither discloses nor suggests a feeding device for a lap winder in which the guide roll 38 and/or the guide plate 39 is omitted. The appellant's arguments in view of a lack of novelty based on this assumption must hence fail.

2. *Article 100(a) EPC – Inventive Step*

The ground for opposition under Article 100(a) EPC in combination with Article 56 EPC does not prejudice maintenance of the patent as granted. Neither the teaching of D1 when taken alone nor the combination of D1 and E1 renders the subject-matter of claim 1 obvious.

2.1 In the oral proceedings, the appellant presented three inventive step attacks replacing those put forward in the written proceedings.

2.2 All objections are based on the single distinguishing feature identified above, i.e. on the implied absence of any component affecting the transport of the fibre slivers from the final deviator, i.e. roll 38, to the

introduction cylinders of the drawing group. For the sake of completeness the Board notes that no other distinguishing features between the subject-matter of claim 1 and the lap winder apparatus known from D1 can be found. Contrary to the view of the respondent, the Board considers the final deviator 38 to form an upper abutment for the deviated web suitable to limit the trajectory of the deviated web above the introduction reference plane Z, which is the entry plane between the introduction cylinders 40, 41 in Figure 6 of D1.

2.3 In a first attack, the appellant argued that the lower extension of the guide plate 39 towards the pair of rollers 40 and 41 was not necessary to provide the clamping functionality described in column 7, lines 49 to 52. The skilled person would therefore contemplate shortening the guide plate 39 or omitting it altogether in order to reduce costs. The objective technical problem was thus to reduce costs. The Board is not convinced by this argument. Even if the technical problem were accepted, the Board is neither convinced that shortening a piece of flat metal sheet would make the entire lap winder cheaper, nor that the skilled person would actually be motivated to do so. As laid out in the considerations with regard to novelty above, the guide plate 39 also serves the purpose of guiding the slivers to the pair of rollers 40 and 41, at which place the individual slivers need to be arranged closely and evenly side-by-side. The necessity of this guiding function by plate 39 is consistently highlighted in D1, already by its name as well as in, for example, column 4, line 47, column 7, line 41. The skilled person thus has no reason to eliminate that functionality which would be the consequence of shortening the guide plate. This would be all the more true if the guide plate were omitted, as both the

clamping function and the ability to guide the slivers would be forfeited. That the tension of the fibre slivers between roll 38 and the introductory cylinders 40 and 41 of the drawing group disclosed in D1 would be high enough, allowing therefore omission of the plate, as also argued by the appellant, is not disclosed in D1 and is explicitly contradicted by the disclosed purpose of guide plate 39.

2.4 A second attack was based on the interpretation that D1 suggested in column 8, lines 1 to 4, to omit the guide roll 38 when the feeding device 14 is arranged in an inclined way. As the Board does not follow this interpretation for the reasons given in point 1.1 above, this argument cannot be persuasive. Moreover, it is noted for the sake of completeness that the first paragraph in column 8 of D1 teaches to arrange the feeding device 14 not just in any inclined way, but such that an additional deviation by the guide roll 38 becomes superfluous. The Board concludes that this refers to an inclination of the group of slivers 30 to the right in Figure 6 (to which this paragraph refers), rather than to the left as argued by the appellant. In such a constellation the sliver guiding part 15 or the final deviation rolls of the feeding device 14 become the final deviator. With the guide roll 38 and the guide plate 39 both remaining at their place, the parts 14 and 15 are not positioned immediately upstream of the drawing group. The skilled person would still have no motivation other than hindsight to omit in this instance guide roll 38 and guide plate 39, as reasoned already above.

2.5 In a third attack, the appellant argued that E1 gave an incentive to the skilled person to substitute the guide roll 38 and the guide plate 39 by a final deviator in

the form of the perforated plate 19 depicted in Figure 1 of E1. The Board finds also this objection unconvincing.

2.5.1 E1 discloses an electromechanical structure adapted to provide a machine stop signal when fiber slivers slacken or break. For this purpose hinged feeler gates 27 are mounted to the perforated plate 19. Even if it were considered that the plate 19 of E1 were cheaper to manufacture and that this would have been immediately apparent - an assumption for which there is no basis in E1, since the plate 19 has a complex structure in order to accommodate the gates 27 on it, see Fig 1 -, this would not be a motivation to substitute the guide roll 38 and the guide plate 39 with it. In doing so the skilled person would lose the clamping function of these two components, which is however necessary for the smooth and steady feeding of the group of slivers into the pair of rollers 40 and 41 without being twisted (column 7, lines 53-58). In this respect the Board is not persuaded by the contention of the appellant that twisting of the fibre slivers would not constitute a major concern in D1 since it was not mentioned in the underlying problem and therefore the pair of components 38 and 39 could clearly be omitted. Despite indeed not being formulated in the more general problem underlying D1 (see column 1, lines 48 to 51), it is clear from *inter alia* the preceding paragraph (column 1, lines 38 to 47) that twisting of the fibre sliver is not only highly undesirable but the very reason why the invention tries to solve the problem mentioned thereafter, when it states that "it is therefore the problem of the invention ..." ('*Es ist deshalb Aufgabe der Erfindung...*' - translation and emphasis by the Board). As also argued by the respondent, the passage in column 7, lines 55 to 58,

emphasises this, when it states that the fibre slivers have no opportunity to be twisted between the guide roll 38 and the guide plate 39 and thereby create an undesired structure ('*...zumal die Faserbänder hier keine Möglichkeit mehr haben, sich zu verdrehen und somit eine unerwünschte Struktur zu erzeugen*' - translation and emphasis by the Board).

2.5.2 The appellant's argument that the guide roll 38 and the guide plate 39 were in fact not necessary since they were not claimed in the independent claim of D1 is also not accepted. Claims 30 and 31 define preferred forms of the feeding device as claimed in claim 1. Claim 30 refers to the guide roll 38 and the guide plate 39 in a particular arrangement in relation to other parts such as the pair of infeed rollers 41. Claim 31 refers to a particular form of the guide roll 38 comprising guide grooves. In either alternative, and as laid out in the considerations with regard to novelty above (see point 1.1), guiding and clamping are both necessary functions, such that, from a technical point of view, neither the guide roll 38 nor the guide plate 39 can simply be dispensed with. The claim structure of D1 cannot outweigh these technical considerations, which the skilled person is aware of.

2.5.3 The further argument of the appellant that when applying the guide plate of E1, the skilled person would use only those parts which are needed, is also found unconvincing since it is based on hindsight. The different parts connected to the guide plate 19, such as the gates 27 hingedly mounted to it and the sliver guiding apron 12 as well as their relative position are interrelated in order to solve the underlying problem of machine stop due to sliver slackening or breakage. There is absolutely no guidance for the skilled person

as to which parts to omit, let alone to omit those parts necessary to solve the problem underlying E1. If the skilled person applied a 'naked' guide plate 19 , isolated from all components described in E1, in the feeding device of D1, this could not have been motivated other than by knowing the invention of the contested patent.

2.6 None of the inventive step attacks put forward by the appellant during the oral proceedings is hence persuasive. The Board thus concludes that the subject-matter of claim 1 involves an inventive step.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

D. Grundner T. Rosenblatt

Decision electronically authenticated