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Datasheet for the decision of 16 January 2024

Case Number: T 1369/22 - 3.2.07

Application Number: 16810026.1

Publication Number: 3365119

IPC: B21B17/04, B21B17/14

Language of the proceedings: EN

Title of invention:
MULTI-STAND ROLLING MILL FOR ROD-SHAPED BODIES COMPRISING THREE MOTORIZED-ROLLERS STANDS

Patent Proprietor:
Danieli & C. Officine Meccaniche S.p.A.

Opponent:
SMS group GmbH

Headword:

Relevant legal provisions:
EPC Art. 56
RPBA 2020 Art. 13(2), 12(6)

Keyword:
Inventive step - (no) - effect not made credible within the whole scope of claim - reformulation of the technical problem
Late-filed argument - justification for late filing (yes) - admitted (yes)
Late-filed auxiliary requests - admitted (no)

Decisions cited:

Catchword:

Europäisches Patentamt
European Patent Office
Office européen des brevets

Beschwerdekammern

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Case Number: T 1369/22 - 3.2.07

D E C I S I O N
of Technical Board of Appeal 3.2.07
of 16 January 2024

Appellant: (Patent Proprietor)	Danieli & C. Officine Meccaniche S.p.A. Via Nazionale 41 33042 Buttrio (IT)
Representative:	Cinquantini, Bruno Notarbartolo & Gervasi S.p.A. Viale Achille Papa, 30 20149 Milano (IT)
Respondent: (Opponent)	SMS group GmbH Eduard-Schloemann-Strasse 4 40237 Düsseldorf (DE)
Representative:	Kross, Ulrich Hemmerich & Kollegen Patentanwälte Hammerstraße 2 57072 Siegen (DE)
Decision under appeal:	**Decision of the Opposition Division of the European Patent Office posted on 31 March 2022 revoking European patent No. 3365119 pursuant to Article 101(3)(b) EPC.**

Composition of the Board:

Chairman	G. Patton
Members:	V. Bevilacqua
	P. Guntz

Summary of Facts and Submissions

I. The patent proprietor (appellant) lodged an appeal in the prescribed form and within the prescribed time limit against the opposition division's decision to revoke European patent No. 3 365 119.

II. The opposition had been filed against the patent in its entirety based on the ground for opposition of lack of inventive step, pursuant to Article 100(a) EPC, as well as on the ground of insufficiency of disclosure, pursuant to Article 100(b) EPC.

The opposition division found that the ground for opposition of lack of inventive step prejudiced the maintenance of the patent as granted. Since the then auxiliary requests 1 and 2 were also found to lack inventive step, the opposition division revoked the patent.

III. With the statement setting out the grounds of appeal the appellant requested

that the decision under appeal be set aside and

that the patent be maintained as granted (main request) or, in the alternative,
that the patent be maintained in amended form based on one of auxiliary requests 1 to 8 as submitted with the statement of grounds of appeal,
with auxiliary requests 1 and 3 respectively corresponding to auxiliary requests 1 and 2 underlying the impugned decision.

The respondent (opponent) requested

that the appeal be dismissed.

It objected to the admittance of auxiliary requests 2 and 4 to 8 and, if these requests were to be admitted, requested

that the case be remitted to the opposition division for further prosecution.

IV. In preparation for oral proceedings, scheduled at the parties' request, the Board gave its preliminary assessment of the case in a communication pursuant to Article 15(1) RPBA 2020.

V. Neither the appellant nor the respondent responded to the above-mentioned communication in writing.

VI. Oral proceedings before the Board took place by videoconference on 16 January 2023.

At the conclusion of the proceedings both parties confirmed their initial requests as final and the decision was announced. Further details of the proceedings can be found in the minutes of these proceedings.

The parties' lines of argument are dealt with in detail in the reasons for the decision.

VII. The following documents, mentioned in the appealed decision, will be referred to in the present decision:

D8: WO 2007/014911 A1
D9: JPH 07-314013 A

D9a: partial machine translation of D9
D9b: partial human translation of D9
D10: JP H 05-088704 U
D10a: translation of parts of D10
D22: Technisch-wirtschaftliche Möglichkeiten zur Herstellung von Stahlsträngen und ihrer Verarbeitung zu nahtlosen Rohren, W.J. Löpmann
D23: Das Walzen von Hohlkörpern und Kalibrieren von Werkzeugen zur Herstellung nahtloser Rohre, P. Grüner, 1959, Springer-Verlag.

The following additional documents were submitted with the statement setting out the grounds of appeal:

D9b1: complete human translation of D9
D27: extract from "Enciclopedia delle lavorazioni meccaniche", 1985.

VIII. Claim 1 of the **main request** reads as follows:

"A rolling mill (1) for tubular bodies comprising a first section (10) for rolling on mandrel defined by a first plurality of rolling stands (15', 15, 15") arranged in sequence along a rolling axis (100), said rolling mill (1) comprising a second section (20) for extracting said mandrel and calibrating the diameter of said tubular bodies, said second section being downstream of said first section (10), said second section (20) comprising a second plurality of rolling stands (25', 25, 26, 27, 26', 27') without mandrel, arranged in sequence along said rolling axis (100), wherein each stand (25', 25, 26, 27, 26', 27') of said second section (20) comprises three rollers, characterized in that said tubular bodies exiting from said first section (10) directly enter said second section (20), the rotation axes of which are arranged

at 120° relative to one another and wherein, for each stand (25', 25, 26, 27, 26', 27'), said rotation axes are rotated by 180° relative to corresponding rotation axes of an adjacent stand, said position of said rotation axes being assessed with respect to a vertical reference direction, and wherein at least one stand of said second section (20) comprises a motorized roller having a vertical rotation axis."

Claim 1 of **auxiliary request 1** reads as follows (additions compared with claim 1 of the main request are indicated in bold, deletions in strikethrough, emphasis added by the Board):

"A rolling mill (1) for tubular bodies comprising a first section (10) for rolling on mandrel defined by a first plurality of rolling stands (15', 15, 15") arranged in sequence along a rolling axis (100), said rolling mill (1) comprising a second section (20) for extracting said mandrel and calibrating the diameter of said tubular bodies, said second section being downstream of said first section (10), said second section (20) comprising a second plurality of rolling stands (25', 25, 26, 27, 26', 27') without mandrel, arranged in sequence along said rolling axis (100), wherein each stand (25', 25, 26, 27, 26', 27') of said second section (20) comprises three rollers, characterized in that said tubular bodies exiting from said first section (10) directly enter said second section (20), the rotation axes of which are arranged at 120° relative to one another and wherein, for each stand (25', 25, 26, 27, 26', 27'), said rotation axes are rotated by 180° relative to corresponding rotation axes of an adjacent stand, said position of said rotation axes being assessed with respect to a vertical reference direction, **~~and~~** wherein at least one stand of

said second section (20) comprises a motorized roller having a vertical rotation axis,

wherein said second section (20) comprises a first stretch (21) which defines a first plurality of lodging positions each of which configured for accommodating a fixed rollers stand or a dummy stand, said second section (20) comprising a second stretch (22), downstream of said first stretch (21), which defines a second plurality of lodging positions each of which configured for accommodating a fixed rollers stand or a dummy stand or an adjustable rollers stand."

Claim 1 of **auxiliary request 2** corresponds to claim 1 of auxiliary request 1, with the features added compared with the characterising part of the main request having been amended as follows (additions are indicated in bold, deletions in strikethrough, emphasis added by the Board):

"wherein said second section (20) comprises a first stretch (21) which defines a first plurality of lodging positions each of which **accommodates** ~~**configured for accommodating**~~ a fixed rollers stand or a dummy stand, said second section (20) comprising a second stretch (22), downstream of said first stretch (21), which defines a second plurality of lodging positions each of which **accommodates** ~~**configured for accommodating**~~ a fixed rollers stand or a dummy stand or an adjustable rollers stand."

Claim 1 of **auxiliary request 3** corresponds to claim 1 of auxiliary request 1, with the following features added to the end of its characterising part:

"and wherein said second section (20) comprises at least one adjustable rollers stand (26, 27, 26', 27')."

Claim 1 of **auxiliary request 4** corresponds to claim 1 of auxiliary request 1, with the following features added to the end of its characterising part:

"wherein said second section (20) comprises a group (60, 62) of adjustable rollers stands, said group (60, 62) comprising:
- a first stand (26, 26') and a second stand (27, 27') adjacent to said first stand (26, 26'), wherein said first stand (26, 26') comprises at least one roller motorized by an actuating means;
- a transmission device (91) which operatively connects said at least one roller (34, 35, 36) of said first stand (26, 26') to at least one roller (34', 35', 36') of said second stand (27, 27') so that both the rollers are actuated by said actuating means."

Claim 1 of **auxiliary request 5** corresponds to claim 1 of auxiliary request 4, with the following features added to the end of its characterising part:

"wherein said second stretch (22) of said second section (20) defines three lodging positions and wherein said group (62, 60) of adjustable rollers stands is configured to occupy the first lodging position and the second lodging position, or the second lodging position and the third lodging position, downstream of said first stretch (21)."

Claim 1 of **auxiliary request 6** corresponds to claim 1 of auxiliary request 2, with the following features added to the end of its characterising part:

"and wherein said second section (20) comprises at least one adjustable rollers stand (26, 27, 26', 27')."

Claim 1 of **auxiliary request 7** corresponds to claim 1 of auxiliary request 2, with the following features added to the end of its characterising part:

"and wherein said second section (20) comprises a group (60, 62) of adjustable rollers stands, said group (60, 62) comprising:
- a first stand (26, 26') and a second stand (27, 27') adjacent to said first stand (26, 26'), wherein said first stand (26, 26') comprises at least one roller motorized by an actuating means;
- a transmission device (91) which operatively connects said at least one roller (34, 35, 36) of said first stand (26, 26') to at least one roller (34', 35', 36') of said second stand (27, 27') so that both the rollers are actuated by said actuating means."

Claim 1 of **auxiliary request 8** corresponds to claim 1 of auxiliary request 7, with the following features added to the end of its characterising part:

"wherein said second stretch (22) of said second section (20) defines three lodging positions and wherein said group (62, 60) of adjustable rollers stands is configured to occupy the first lodging position and the second lodging position, or the second lodging position and the third lodging position, downstream of said first stretch (21)."

Reasons for the Decision

1. D9b1 - admittance

As will be discussed in the following, because none of the appellant's requests is admissible or allowable, even when taking into account the content of D9b1, the objection raised by the respondent against the admittance of D9b1 into the appeal proceedings is irrelevant and does not need to be addressed.

2. Claim 1 of the main request - lack of inventive step

2.1 Distinguishing features

2.1.1 The opposition division found (appealed decision, section II.1.2) that the following feature, identified as feature 7 in the statement of grounds of appeal, was the only difference between the subject-matter of claim 1 of the main request and the rolling mill disclosed in document D9:

"at least one stand of said second section comprises a motorized roller having a vertical rotation axis".

In the appealed decision, the opposition division dismissed the appellant's arguments, according to which D9 also failed to disclose that

"said rolling mill comprising a second section for extracting said mandrel and calibrating the diameter of said tubular bodies" (referred to as "feature 3, second part", in the statement setting out the grounds of appeal)

and that

"for each stand, said rotation axes are rotated by 180° relative to corresponding rotation axes of an adjacent stand, said position of said rotation axes being assessed with respect to a vertical reference direction" (referred to as "feature 6" in the statement setting out the grounds of appeal).

2.1.2 The appellant contests the above findings regarding the second part of feature 3 and feature 6 as follows.

D9, while disclosing that the second section of the rolling mill is for extracting the mandrel, as claimed, fails to disclose that it is also for calibrating the diameter of the tubular bodies.

This is particularly evident from figures 16, 14a and 14b of this document, which show tubular bodies being rolled that have cross sections which are nearly triangular in shape and are clearly non-circular.

From this depiction a skilled person would understand that the rolling stands of the second section in D9 are not for calibrating, but rather specifically and only perform a reduction in the diameter of the tubular bodies.

The fact that, in the eyes of a skilled person, calibrating cannot be equated with a mere reduction in the wall thickness of tubular bodies is confirmed by D27, pages 258 and 259 (see figure 78), D22, figure 156, as well as D23, figure 161, with all these documents reflecting the skilled person's knowledge.

The second section of the rolling mill in D9 is not for calibrating the diameter of the tubular bodies because calibrating requires tools which are specifically designed to deform the tubular bodies into a perfectly circular cross section, and no such tools are derivable from document D9.

This is also confirmed by the description of figures 14a and 14b given in document D9 (paragraphs [0004] and [0011]; reference was made to the available translations D9a, D9b and D9b1), which consistently refers to reduction, and never mentions calibrating.

The opposition division found that this feature was disclosed because it misunderstood paragraph [0028] of the patent in suit. When interpreted correctly, this passage clarifies that calibrating is a specific rolling operation, distinct from a size reduction, carried out downstream of the reduction roll stands, the purpose of which is to achieve a circular shape correcting geometric defects by potentially also achieving a slight diameter reduction.

This passage does not provide a basis for concluding that there is no distinction between calibrating and reducing just because the diameter of the tubular bodies may also become smaller when these are calibrated.

According to the appellant, feature 6 is also not disclosed because the rotation axes of the rolling stands shown in figures 1, 14a and 14b of D9 remain the same even if the stands are rotated by 180° relative to a vertical axis crossing the centre of the tubular body.

Contrary to the opposition division's findings, this feature goes beyond the well-known 60° rotation between two adjacent roll stands comprising three rolls arranged at 120° shown in D9.

This feature requires that one roll stand has rolls oriented in a "Y" arrangement facing up and the adjacent roll stand has the rolls also oriented in a "Y" shape, but turned upside down.

2.1.3 The appellant has not convincingly demonstrated that the findings in the appealed decision are incorrect, for the following reasons.

The documents reflecting the knowledge of the skilled person cited by the parties (D22, D23, D27) do not contain any passage on the basis of which it is possible to conclude that, in the eyes of a skilled person, rolling stands which reduce the diameter of the tubular body, such as those depicted in figures 14a and 14b of D9, are not suitable "for calibrating the diameter".

On the other hand, by referring to the same general knowledge, the respondent convincingly argued that the expression "for calibrating the diameter", as claimed, would have been broadly understood by the skilled person as a rolling operation involving offsetting rolling stand arrangements from one rolling stand to the following one, as described in figure 156 of D22.

The appellant's arguments are also not convincing because such calibrating, as confirmed by paragraph [0028] of the patent in suit, also inherently reduces the diameter of the tubular bodies, as also found in figure 156 of D22.

The Board therefore sees no reason to consider that the rather restrictive interpretation of "for calibrating" proposed by the appellant, which is not supported by paragraph [0028] of the patent in suit, would be that chosen by a skilled reader of claim 1 of the main request.

This is in line with the case law (see Case Law of the Boards of Appeal, 10th edition 2022, CLB in the following, II.A.6.1) establishing that a broad term used in a claim is not to be construed narrowly, even if, as argued by the appellant, the narrower interpretation would refer to a structure which is common, but not exclusive, in the technical field concerned.

When interpreting a broadly formulated claim, only technically illogical interpretations should be excluded.

The Board therefore concurs with the findings in the appealed decision, according to which D9 discloses that the second section is suitable for calibrating the diameter of the tubular bodies (second part of feature 3).

The appellant also failed to convincingly demonstrate that D9 does not disclose feature 6.

This is because paragraph 4 of D9, describing figures 14a and 14b, explicitly discloses that "*... the stands, which have been installed so that the reduction directions of the individual rolls are at angles of 120° to one another in a plane perpendicular to the rolling direction, are alternately arranged with the*

reduction directions of the rolls 135 shifted by 60° between adjacent stands, as shown in Fig. 14(a) and (b)" (see D9b). The Board concurs with the respondent and the reasons given in the decision under appeal, page 7, antepenultimate paragraph, that this disclosure in D9 amounts to a formulation, using different wording, of the fact that, for each stand, the rotation axes are rotated by 180° relative to corresponding rotation axes of an adjacent stand, said position of said rotation axes being assessed with respect to a vertical reference direction.

2.1.4 The above analysis demonstrates that the last feature of claim 1 (at least one stand of said second section comprises a motorised roller having a vertical rotation axis), identified as feature 7 by the appellant, is the only difference between the subject-matter of claim 1 of the main request and the rolling mill disclosed in document D9.

2.2 New objection - admissibility

2.2.1 During oral proceedings before the Board, the respondent argued for the first time that it was not apparent how this distinguishing feature on its own could achieve the effect of facilitating the replacement of a rolling stand, upon which not only the appealed decision (section II.1.2) but also the appellant's arguments were based.

The respondent put forward that
- D9 did not provide any information on how the rolling stands are actuated, and that
- the patent in suit did not disclose any particular effect being achieved by the vertical orientation of the rotation axis of a roller.

On the basis of the above considerations, the respondent raised, for the first time, an inventive-step objection starting from document D9, re-formulating the problem to be solved as "how to actuate the rolling stands of the rolling mill known from D9".

2.2.2 The appellant requested that this new line of attack, which was an amendment to the respondent's case made after notification of the summons to oral proceedings, not be admitted under Article 13(2) RPBA 2020.

2.2.3 The reformulation of the problem to be solved is considered admissible by the Board, because the respondent convincingly demonstrated that there were exceptional circumstances provided for in Article 13(2) RPBA 2020, as explained in the following.

This reformulation is in fact to be considered a justifiable response to the second sentence of section 1.2.2. of the communication pursuant to Article 15(1) RPBA 2020, which reads as follows:

"The effect of allowing faster replacement (mentioned at paragraphs [0015] and [0019] of the patent in suit) is not prima facie evident from the structural details given in the distinguishing feature, but is obtained when the replacement is performed according to the method disclosed in paragraph [0065] of the patent in suit."

This is because, as argued by the respondent, this sentence can be seen as introducing an aspect into the discussion of inventive step which goes beyond what had been submitted with the statement of grounds of appeal, in which the effect of allowing faster replacement of

the rolling stands is never discussed in the light of paragraph [0065] of the description.

The Board notes that no analysis of paragraph [0065] is given in the statement of grounds, and that the appellant failed to contest the respondent's interpretation of the second sentence of section 1.2.2. of the Board's communication.

The respondent has also convincingly demonstrated that the distinguishing features alone do not achieve the effect of simplifying the replacement of rolling stands, as mentioned in the appealed decision.

As it convincingly argued, while the effect mentioned in paragraph [0015] of the description relied upon the compact arrangement of the rolling stand foundations achievable with a vertical orientation of the motor shaft acting on the motorised roller (as also explained in paragraphs [0029], [0059], [0065] and [0068] of the patent in suit and as acknowledged by the appellant), claim 1 of the main request did not specify any details regarding the orientation and position of any motor shaft.

The same applies to the effect of reducing the cost of the foundations, to which the appellant also referred verbally and in the statement of grounds (page 13, last paragraph), which effect, always according to the description of the patent in suit, is again achieved by the vertical orientation of the motor shaft, which is not a feature of claim 1. In this respect the Board agrees with the respondent that the axis of the motor shaft is not necessarily aligned with the rotation axis of the roller, whether or not it is vertical.

The appellant has not specifically addressed this aspect during the discussion, demonstrating how a skilled reader would have been able to derive this or any other particular technical effect from the patent in suit as being achieved only by the vertical orientation of the axis of a motorised roller.

Taking the above into account, the reformulation of the problem to be solved proposed by the respondent as "how to drive the rolling stands shown in D9" was admitted into appeal proceedings.

2.3 Discussion of inventive step

2.3.1 The Board fully concurs with the respondent's analysis, according to which the skilled person, aiming to find a way to drive the rolling stands of the second section of the mill disclosed in document D9, would have arrived at the subject-matter of claim 1 of the main request without an inventive step by combining the teaching of D9 with that of D10.

This is because figure 4 of D10 shows a rolling stand (7) comprising a motor (15) actuating a roller (10) having a vertical rotation axis, as claimed (see also paragraph [0010] of the translation D10a).

Faced with the above-mentioned technical problem, the skilled person would immediately think to apply the teaching of D10 to the rolling mill disclosed in D9. In doing so, they would encounter no technical difficulties and would arrive at the subject-matter of claim 1 of the main request without having to exercise any inventive skill.

Consequently, and as found in the appealed decision, the subject-matter of this claim does not involve an inventive step (Article 56 EPC).

2.3.2 The appellant argued that the subject-matter of claim 1 of the main request was inventive over the combination of the teaching of documents D9 and D10 because the skilled person
"would not find in D10 any hint to replace the stands of the second section 5 of the mill of D9 with the stands 7, 8 disclosed by D10 in order to arrive at the solution of the invention of claim 1" (statement of grounds, page 14).

According to the appellant, the skilled person would not have been motivated to combine D9 and D10 in the manner claimed because D10 related to a different type of mill setup from that in D9.

D9 provides teaching leading away from using an extractor and reheating furnace as in figure 1 of D10, and instead uses a reducing mill for extraction (see figure 1 and the available translations of paragraph [0011] of D9).

D9 in fact identifies avoiding the extractor as being an advantage (again, see the translations of paragraph [0011] of D9).

While D10 discloses a mill with four two-roll stands in the first section and an extractor made up of two three-roll stands in the second section, D9 discloses a reducing mill with three-roll stands in the second section.

The extractor in D10 is not designed to perform or disclosed as performing diameter calibration. Extraction may incidentally reduce the diameter slightly when removing the mandrel, but this is not intentional calibration.

D10 only has two-roll stands in its first section, whereas D9 has three-roll stands.

In view of these differences, the skilled person would not have found any motivation or suggestion in D10 to modify the reducing mill stands in the second section of D9 to arrive at the claimed invention.

Doing so would go against the explicit teaching and advantages of the setup in D9, which avoids an extractor.

2.3.3 The Board is not convinced, for the following reasons.

While D9 and D10 have different overall mill designs,as argued by the respondent, the key question remains of whether D10 provides any motivation to modify the rolling stands in the second section of D9 in order to arrive at the claimed invention.

In this regard, D10 explicitly discloses stands in the second section having a motorised roller with a vertical rotation axis (figures 1 and 4).

The advantage of this vertical orientation would be immediately evident to the skilled person when looking at figure 4 of D10. Specifically, as argued by the respondent, the vertically oriented motorised roller allowed for compact and convenient coupling of the roller to a drive motor mounted directly above it, as

shown in figure 4 and explained at paragraph [0010] of this document.

As this particular teaching does not rely on the overall compatibility of the mills in D9 and D10, the skilled person would recognise that the claimed vertical orientation shown in D10 could be easily and readily implemented in D9.

3. Auxiliary request 1 - lack of inventive step

3.1 The opposition division also found that claim 1 of auxiliary request 1 lacks inventive step over the combination of documents D9 and D10; see decision under appeal, point II.1.3.1.

This was because it held that the features added to claim 1 of auxiliary request 1, defining first and second stretches of the second section with lodging positions "configured for accommodating" fixed rollers stands, dummy stands or adjustable rollers stands, were not novel in view of the disclosure in figure 1 of D9 of a second section (5) with at least four lodging positions (two for the "first stretch", two for the "second stretch"). Therefore, the added features did not contribute to an inventive step.

3.2 The appellant argued that D9 did not directly and unambiguously disclose fixed rollers stands, dummy stands or adjustable rollers stands in the first and second stretches.

With reference to the drawings of the patent in suit, the appellant also argued that, in the eyes of a skilled person, lodging positions in a rolling mill which were configured for accommodating a particular

type of rollers stand (fixed, dummy or adjustable) could not accommodate a rollers stand of another type.

Based on the above, the appellant concluded that the features added to claim 1 of auxiliary request 1 are novel and the findings in the appealed decision are incorrect.

3.3 The Board disagrees, and instead concurs with the respondent and with the appealed decision that the broad expression "configured for accommodating" used in claim 1 does not require any particular structural differences in the lodging positions themselves.

These added features therefore only require positions suitable for accommodating different types of stands, and the appellant has not convincingly explained why, in the eyes of a skilled person, a position configured for fixed rollers stands would be different from one for dummy stands or for adjustable rollers stands.

The appellant's argument which aims to prove the contrary is not convincing because it lacks general validity, as it is based on the specific rolling stands set out in the patent in suit.

The additional features thus do not appear to add anything novel over the disclosure of D9 of multiple lodging positions in the second section.

As there are no further distinguishing features, the subject-matter of claim 1 of auxiliary request 1 does not involve an inventive step in view of the combination of the teaching of documents D9 and D10 for the same reasons as mentioned above in relation to claim 1 of the main request.

Auxiliary request 1 therefore cannot be allowed.

4. Admissibility of auxiliary requests 2 and 4 to 8

4.1 With its statement of grounds of appeal the appellant filed auxiliary requests 2 and 4 to 8.

The appellant does not contest that these specific requests were filed for the first time on appeal.

The appellant argued that each of these requests overcame the objections directed against the main request during opposition proceedings without raising new issues.

Each of these auxiliary requests were also to be admitted because they had been filed in response to the opposition division revoking the patent. In particular, it was surprised by the decision under appeal providing more detailed explanation for the inventive-step objection based on the combination of documents D9 and D10.

4.2 The respondent requested that none of the newly filed auxiliary requests be admitted as they could and should have been submitted during opposition proceedings.

4.3 According to Article 12(6) RPBA 2020, the Board will not admit requests which should have been submitted in the proceedings leading to the decision under appeal unless the circumstances of the appeal case justify their admittance.

The circumstances invoked by the appellant do not justify the filing of new auxiliary requests with the statement of grounds, for the following reasons.

The Board cannot see how the opposition division's decision to revoke the patent could have surprised the appellant.

This is because the objection of lack of inventive step based on the combination of D9 with D10 was discussed extensively during the opposition proceedings, both in writing (see the notice of opposition, section 4.3, and the reply to it dated 23 February 2021, section 3.2 for the main request, and the respondent's letter dated 1 February 2022 for the then auxiliary requests 1 and 2) and at oral proceedings (see minutes). The corresponding reasoning put forward in the decision under appeal therefore cannot be considered a surprise. The appellant has not pointed out any part of it which had not been discussed in the opposition proceedings.

Furthermore, even in the case in which more detailed reasoning had been regarded as having been provided in the decision under appeal, the Board notes that this as such cannot usually constitute circumstances for the admittance of amendments in the appeal proceedings.

The appellant therefore had ample opportunity to file additional auxiliary requests in addition to auxiliary requests 1 and 2 during the first-instance proceedings for them to be part of the decision under appeal to be reviewed.

Indeed, after deliberating on these issues, the Chair of the opposition division asked at the end of the oral proceedings whether the appellant had any further

requests. The appellant explicitly confirmed it had no other requests beyond those already on file (see minutes, page 3, third paragraph of section "Auxiliary request 2").

Based on the above it is not apparent why the appellant did not submit the present auxiliary requests 2 and 4 to 8 before the opposition division during the oral proceedings at the latest, and the Board cannot see any circumstances in the present appeal case which would justify allowing the appellant to file these requests with the statement setting out the grounds of appeal.

Therefore, the late-filed auxiliary requests 2 and 4 to 8 are not admitted into the appeal proceedings in exercise of the Board's discretion under Article 12(6) RPBA.

5. Auxiliary request 3

5.1 The opposition division found that the features of claim 1 of auxiliary request 3 which had been added compared with claim 1 of auxiliary request 1, namely "wherein said second section comprises at least one adjustable rollers stand", were already disclosed in D9.

This was because "*the second section of the rolling mill of D9 obviously comprises at least one adjustable rollers stand*" (appealed decision, II.14.1).

Referring to the reasons already set out in relation to claim 1 of the main request, the opposition division then denied inventive step.

5.2 The appellant contests the above findings, arguing that the complete translation of D9 (D9b1) demonstrated that adjustable rollers stands were used only in the first section of the rolling mill in D9, at the end of the mandrel rolling stands, and that no adjustable rollers stand was disclosed in the second section of this known rolling mill.

The features of claim 1 of auxiliary request 3 which had been added compared with claim 1 of auxiliary request 1 were therefore novel.

During oral proceedings, referring to paragraph [0020] of the patent in suit, the appellant argued that these features made it possible to achieve the technical effect whereby at least one stand of the second section of the rolling mill in D9 could be adjusted to vary the rolling conditions and implement a corresponding variation in diameter, in order to be adapted to the circumstances of a particular rolling situation.

The problem to be solved, always according to the appellant, is to be formulated as "how to increase flexibility of the second section of the rolling mill known from D9".

According to the appellant, inventive step over the combination of documents D9 and D10 should be acknowledged because D10 does not teach the use of adjustable rollers stands to increase flexibility of the second section of a rolling mill.

5.3 The Board disagrees.

This is because, as argued by the respondent, which also referred to D8 (figure 3, abstract) in this

context, the advantages achieved by adjustable rollers stands with respect to fixed rollers stands were well known and evident as such to a skilled person.

These advantages are even disclosed in D9 itself (D9b1, paragraphs [0021] and [0022]).

Therefore, adding adjustable rollers stands in the second section of the rolling mill in D9 in order to make use of the known features and advantageous effects of this particular type of stand ("adjustability") must be regarded as an obvious way for the skilled person to solve the problem of increasing flexibility of this second section.

As a consequence of the above, the appellant also failed to demonstrate that the negative findings on inventive step in section II.1.4 of the appealed decision were incorrect.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

G. Nachtigall G. Patton

Decision electronically authenticated