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**Datasheet for the decision
of 6 September 2023**

Case Number: T 1051/22 - 3.2.07

Application Number: 12847541.5

Publication Number: 2777814

IPC: B02C15/04, B02C15/00

Language of the proceedings: EN

Title of invention:
VERTICAL ROLLER MILL

Patent Proprietor:
Kawasaki Jukogyo Kabushiki Kaisha

Opponent:
thyssenkrupp Industrial Solutions AG

Headword:

Relevant legal provisions:
EPC Art. 123(2)

Keyword:
Amendments - added subject-matter (yes)

Decisions cited:

Catchword:



Beschwerdekammern

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Case Number: T 1051/22 - 3.2.07

D E C I S I O N
of Technical Board of Appeal 3.2.07
of 6 September 2023

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Decision under appeal: **Interlocutory decision of the Opposition
Division of the European Patent Office posted on
14 March 2022 concerning maintenance of the
European Patent No. 2777814 in amended form.**

Composition of the Board:

Chairwoman S. Watson
Members: V. Bevilacqua
R. Cramer

Summary of Facts and Submissions

I. An appeal was filed by the opponent (appellant) against the decision of the opposition division to maintain European patent No. 2 777 814 in amended form according to the then auxiliary request A which the patent proprietor (respondent) now pursues as its main request in appeal proceedings.

II. The appellant initially requested

- that the decision under appeal be set aside and the patent in suit be revoked.

The respondent initially requested

- that the appeal be dismissed and the patent be maintained in the amended form considered by the opposition division to be in compliance with the EPC (auxiliary request A, now **main request**), alternatively
- that, when setting aside the appealed decision, the patent be maintained according to one of the auxiliary requests 1A to 7A, 8, 8A and 9 as filed in opposition proceedings with letter of 2 December 2021 and re-filed with the reply to the appeal.

III. The following document, cited in the appealed decision, will be referred to in the following:

E3: Mensel, K./Keyssner, M. "Quadropol's new dimension"/"Making vertical strides"; International Cement Review, August 2006, pages 72 to 81.

IV. In preparation for oral proceedings, the Board gave its preliminary opinion in a communication pursuant to Article 15(1) RPBA, to which the respondent replied with a letter dated 6 July 2023.

V. Oral proceedings before the Board took place on 6 September 2023.

At the conclusion of the proceedings, the decision was announced. Further details of the oral proceedings can be found in the minutes.

The final requests of the parties were as follows.

The appellant requested

- that the decision under appeal be set aside and the patent in suit be revoked.

The respondent requested

- that the appeal be dismissed.

VI. The arguments of the parties relevant for the decision are dealt with in detail in the reasons for the decision.

VII. **Claim 1** of the main request reads as follows (the feature numbering used in the appealed decision has been added by the Board):

- M1 "A vertical roller mill (11) comprising:
- M2 a reducer (12);
- M3 a plurality of grinding rollers (13) arranged substantially about the reducer (12) along the substantially circumferential direction at positions above the reducer (12),
- M4 the number of the grinding rollers (13) is six or more;
- M5 a rotating table (14) provided between vertical positions of the grinding rollers (13) and the reducer (12) and
- M6 configured to cause grinding objects to be bitten between the rotating table (14) and each of the grinding rollers (13) to grind the grinding objects;
- M7 a rotary driving unit (15) coupled to the rotating table (14) via the reducer(12) to rotate the rotating table (14);
- M8 a plurality of pressing drive units (25) provided so as to respectively correspond to the grinding rollers (13) and
- M9 configured to respectively cause the grinding rollers (13) to be pressed against the rotating table (14); and
- M10 stands (31) made of concrete provided so as to externally surround the reducer (12) and
- M11 configured to support the pressing drive units (25) and the grinding rollers (13) at positions above the reducer(12):
- characterized by
- M12 pressing drive device support bases (27) provided at positions higher than an upper surface of the reducer (12) and supporting the respective pressing drive units (25); and

M13 a passage (32) through which the reducer (12) passes under the pressing drive units (25) and the grinding rollers (13) to be taken out from the stands (31)."

Claim 2 of the main request reads as follows:

"The vertical roller mill (11) according to claim 1, wherein:
the stands (31) have: at least two lower leg portions (28b) sandwiching the passage (32) and respectively provided at both sides of the passage (32); and an upper leg portion (28a) formed at upper portions of the lower leg portions (28b) integrally,
and
the passage (32) is formed below the upper leg portion (28a)."

Reasons for the Decision

1. Main request - Feature M12, added subject-matter
- 1.1 The appellant (see section IV of the statement of grounds of appeal, pages 12 to 14) contested the findings in section C.2.2.3 of the appealed decision arguing that the introduction of feature M12 extended the subject-matter of claim 1 beyond the content of the originally filed documents.

According to the appellant the opposition division wrongly identified paragraphs [0058], [0041], [0042] and [0070] of the original description (reference will be made to the A-publication) as a valid basis therefor.

1.2 The respondent (see from page 8, third paragraph, of the reply to the statement setting out the grounds of appeal) replied that a skilled reader would understand from the originally filed documents taken as a whole that the gist of the invention was a vertical roller mill in which the position at which the grinding rollers are supported on the stands is above the passage for the reducer and can differ from the circumferential position of the respective stands.

As the positions of the stands are decoupled from the circumferential locations at which the grinding rollers are supported, a passage for the reducer can be provided, facilitating maintenance.

During oral proceedings the respondent additionally argued that a skilled reader, being aware of the roller mill in E3, would immediately recognize that decoupling the position of the stands from the position of the support bases was the basic common feature of the roller mills disclosed in the originally filed documents and that the gist of the invention was related to

*"**where** the pressing drive units are supported and not **how** they are supported".*

Clearly, in the eyes of a skilled reader, the way in which the pressing drive units were supported in the depicted examples (i.e. with a rotational coupling) was an incidental feature.

This was because the rotational coupling of the pressing drive units as shown in the figures of the originally filed documents did not contribute to decoupling the positions of the stands from the

circumferential locations at which the grinding rollers were supported.

As a consequence of the above, a skilled reader immediately understood that this particular way of supporting the pressing drive units had nothing to do with creating a passage for the reducer, which would facilitate maintenance of the vertical roller mill.

Feature M12, in which the rotational coupling was omitted, did not therefore extend beyond the above identified general teaching of the originally filed documents.

The respondent also indicated the "combined disclosure" of paragraphs [0058], [0063] and [0070] of the originally filed description as a further basis for feature M12.

1.3 The Board disagrees, and concludes that the appellant convincingly demonstrated the incorrectness of the findings in section C.2.2.3 of the appealed decision, for the following reasons.

1.3.1 According to claim 1 of the main request there are stands (see feature M11) which are "configured to support the pressing drive units" and also, according to feature M12, there are "pressing drive device support bases provided at positions higher than an upper surface of the reducer (12) and supporting the respective pressing drive units".

The respondent failed to convincingly demonstrate that the broad interpretation of "supporting" which formed the basis of the appellant's objection is not correct.

The Board sees no reason for considering that the rather restrictive interpretation proposed by the respondent (see the first paragraph at page 9 of the reply) would be the one chosen by a skilled reader of claim 1 of the main request.

As established in the case law (see Case Law of the Boards of Appeal, 10th edition 2022, II.A.6.3.4), a broad term used in a claim is not to be construed narrowly.

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

- 1.3.2 Paragraphs [0058], [0041] and [0042], mentioned in the appealed decision, belong to the summary of the invention and cannot be regarded as a valid basis for feature M12 because they only disclose that stands support the pressing drive units (feature M11), and do not mention that the pressing drive units are also supported by "pressing drive device support bases".

The disclosure of paragraphs [0063] (line 15) and [0070] (line 16), mentioning pressing drive device support bases, cannot be straightforwardly combined with the disclosure of paragraph [0058], because paragraphs [0063] and [0070] both relate to the embodiment depicted in figures 1 to 5 (see reference sign 27) and paragraph [0058] does not.

- 1.3.3 The submission of the respondent at the oral proceedings (see also the letter dated 6 July 2023) is not convincing. The respondent argues that the skilled reader, who already knows the vertical roller mill of

document E3, would recognise from the application as filed, in particular paragraph [0070], that how the pressing drive units are supported is incidental, and that feature M12 applies directly and unambiguously to the more general context of the claims and is not inextricably linked to the other features of the specific embodiment depicted in figures 1 to 5.

Feature M12, now claimed in isolation, was originally disclosed in the context of "Embodiment 1" (see figures 1 to 5, to which paragraph [0070] explicitly refers). The respondent did not identify any passage in the originally filed documents explicitly mentioning the incidental nature of the rotational coupling of the pressing drive units shown therein.

According to established case law (CLB, *supra*, II.E. 1.9.1) it is normally not allowable to base an amended claim on the extraction of isolated features from a set of features originally disclosed only in combination, for example, in a specific embodiment in the description or drawings of the original application.

Such an amendment can be justified only in the absence of any clearly recognisable functional or structural relationship among the features of the specific combination from which the added feature was extracted.

The Board however follows the argument of the appellant that feature M12 is inextricably linked at least to the features mentioned in paragraph [0063], lines 10 to 14 of the original description, according to which each pressing drive unit shaft is provided at a base end portion of a pressing drive unit, and the pressing drive unit shaft is **rotatably** provided at a pressing drive device support base (see the the sentence

spanning pages 13 and 14 of the statement setting out the grounds of appeal).

This is also because, as explained by the appellant at the oral proceedings, this rotational coupling is essential for obtaining, through the lever effect, the necessary pressing force. Maintaining the functionality of the apparatus without this feature, by possibly using the supporting system shown in E3, figure 5, for the pressing elements, would require a multitude of modifications thereof.

The respondent therefore failed to convincingly demonstrate that a skilled reader would consider the way in which the pressing elements are supported in the originally filed documents as an incidental feature.

- 1.3.4 Claim 1 of the main request, foreseeing pressing drive device support bases only "supporting" the respective pressing drive units, clearly extends beyond this original disclosure, because "supporting" has to be interpreted broadly as also including embodiments in which the pressure drive unit is fixed with respect to the support base, and cannot rotate.

As a consequence of the above the subject-matter of claim 1 of the main request contravenes the requirements of Article 123(2) EPC and the main request cannot be allowed.

- 2. Claim 2, added subject-matter

- 2.1 The opposition division found that the feature of claim 2 of
"at least two lower leg portions sandwiching the

passage"

was based on original claim 10 together with paragraphs [0017], [0019] and paragraphs [0042] and [0067] of the description as originally filed.

- 2.2 The respondent concurs with the appealed decision on the issue that "the more general disclosure in paragraph [0042] prevails over the more specific in paragraph [0067]" (decision, section C.2.3.2, see also page 10 of the respondent's reply to the appeal).

According to the respondent (see also the letter 6 July 2023, page 2) this feature does not extend beyond the content of the originally filed documents because it only expresses in clear terms what is derivable from the figures and from paragraphs [0042], [0043], [0070] and [0079] thereof, namely that the passage is formed at the same vertical level of the lower portions of the stands, which correspond to the lower leg portions of the claim.

- 2.3 The Board disagrees, and concurs with the appellant who argues (statement of grounds, page 16) that the appealed decision is incorrect and that claim 2 of the main request contravenes the requirements of Article 123(2) EPC.

- 2.3.1 There is no basis for the feature "at least two lower leg portions sandwiching the passage" in the originally filed description, which consistently discloses that it is the two upper leg portions sandwiching the passage, and not the two lower leg portions, as claimed (see in particular paragraph [0079], line 45, to which the respondent explicitly

refers, see also paragraphs [0014], line 14; [0097], line 35; [0098], line 45; as well as original claims 1 and 10).

- 2.3.2 Paragraph [0017] also does not disclose that the stands have lower leg portions sandwiching the passage, on the contrary, it explains that the two upper leg portions are respectively provided at both sides of the passage (line 39).

Paragraph [0019] does not even refer to a passage having two sides, but more broadly explains that "spaces where the arrangement spaces are formed" (lines 13-14) can be secured under the upper leg portion because the lower leg portion does not have to be provided at a position immediately under the arm supporter.

This last disclosure therefore clearly does not provide support for the claimed stands having at least two lower leg portions sandwiching the passage and respectively provided at both sides of the passage.

- 2.3.3 Paragraph [0042] of the original description also cannot be considered as a basis for claiming two lower leg portions sandwiching the passage, because this paragraph does not even mention "leg portions".

Paragraphs [0067], mentioned in the appealed decision, specifies that the lower leg portions shown in figure 5, where exactly two stands are depicted, are formed as two semicircular portions.

Although the opposition division reasoned that this paragraph made clear that the lower portions of the stands referred to in paragraph [0042] are "lower leg

portions 28b", paragraph [0067] only refers to the lower portions of the "pressing drive device supporting portions (stand legs)" not the lower portions of the stands.

The Board therefore also finds that the disclosure relative to the embodiments of figures 1 to 5 (Embodiment 1), which comprises paragraph [0070], to which the respondent also refers, cannot provide support for a claim, such as claim 2 of the main request, which does not impose any limitations on the number of stands and the shape of the lower leg portions thereof (appealed decision, section C.2.3.2).

- 2.3.4 The argument of the respondent (letter dated 6 July 2023, page 2) that this feature is disclosed in figure 6, which shows that the leg portions 28b at the same level as the passage (and therefore sandwiching the passage) are the lower leg portions, is already not convincing because figure 6 is not covered by claim 1 of the main request.
- 2.3.5 The subject-matter of original claim 10 also does not help in this respect, as it does not disclose that the stands have two lower leg portions sandwiching the passage and that the upper leg portions of the stands are formed integrally at upper portions of the lower leg portions.
- 2.3.6 As a consequence of the above the subject-matter of claim 2 of the main request also contravenes the requirements of Article 123(2) EPC.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The patent is revoked.

The Registrar:

The Chairwoman:



G. Nachtigall

S. Watson

Decision electronically authenticated