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**Datasheet for the decision  
of 13 January 2022**

**Case Number:** T 1066/17 - 3.2.07

**Application Number:** 09714410.9

**Publication Number:** 2247386

**IPC:** B03C1/01, B03C1/32

**Language of the proceedings:** EN

**Title of invention:**

METHOD AND APPARATUS FOR THE SEPARATION OF SOLID PARTICLES  
HAVING DIFFERENT DENSITIES

**Patent Proprietor:**

Urban Mining Corp B.V.

**Opponent:**

Bakker Holding Son B.V.

**Headword:**

**Relevant legal provisions:**

EPC Art. 123(2)

RPBA 2020 Art. 12(3), 13(2), 24, 25

RPBA Art. 12(2), 12(4)

**Keyword:**

Amendments - extension beyond the content of the application  
as filed (yes) - allowable (no)

Late-filed requests - submitted after arrangement of oral  
proceedings - exceptional circumstances (no) - admitted (no)

**Decisions cited:**

T 0431/03, T 2608/17

**Catchword:**



**Beschwerdekammern**  
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Case Number: T 1066/17 - 3.2.07

**D E C I S I O N**  
**of Technical Board of Appeal 3.2.07**  
**of 13 January 2022**

**Appellant:** Bakker Holding Son B.V.  
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**Representative:** Algemeen Octrooi- en Merkenbureau B.V.  
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**Respondent:** Urban Mining Corp B.V.  
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**Representative:** Van Breda, Jacobus  
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**Decision under appeal:** **Interlocutory decision of the Opposition  
Division of the European Patent Office posted on  
7 March 2017 concerning maintenance of the  
European Patent No. 2247386 in amended form.**

**Composition of the Board:**

**Chairman** I. Beckedorf  
**Members:** A. Cano Palmero  
A. Pieracci

## **Summary of Facts and Submissions**

- I. The opponent (appellant) lodged an appeal within the prescribed period and in the prescribed form against the decision of the opposition division to maintain European patent No. 2 247 386 in amended form on the basis of the then auxiliary request 1.
- II. The opposition was directed against the patent in its entirety and based on all grounds for opposition pursuant to Article 100(a) to (c) EPC.
- III. In preparation for oral proceedings, scheduled upon the parties' requests, the Board communicated its preliminary assessment of the case to the parties by means of a communication pursuant to Article 15(1) RPBA 2020. The Board indicated that the appeal was likely to be allowed.
- IV. The patent proprietor (respondent) made further submissions with letters dated 5 March 2020 and 27 May 2020 and filed with the former (conditional) auxiliary request requests 1, 1A, 2A, 3A, 4A, 5A and 6A.  
The appellant filed observations with letter dated 16 October 2020.
- V. Oral proceedings before the Board took place on 13 January 2022.

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

VI. The final requests of the parties are as follows,

for the appellant

that the decision under appeal be set aside and  
that the patent be revoked;

for the respondent

that the appeal be dismissed, *i.e.* that the patent  
be maintained in amended form held by the  
opposition division to meet the requirements of the  
EPC (then auxiliary request 1 and now main  
request),  
or in the alternative, when setting aside the  
decision under appeal,  
that the patent be maintained in amended form on  
the basis of one of the sets of claims filed  
as auxiliary requests 1 to 6 with the  
respondent's reply to the statement of grounds of  
appeal and  
as (conditional) auxiliary requests 1, 1A, 2A,  
3A, 4A, 5A and 6A with letter dated 5 March 2020.

VII. The lines of arguments of the parties are dealt with in  
detail in the reasons for the decision. They are  
focused on the following aspects

- allowability of the amendments of the patent as  
maintained by the opposition division and of auxiliary  
requests 1 to 6 filed with the reply to the statement  
of grounds of appeal, and
- admittance of (conditional) auxiliary requests 1, 1A,  
2A, 3A, 4A, 5A and 6A filed with letter of 5 March 2020  
into the proceedings.

VIII. Independent **claim 1** according to the patent as maintained by the opposition division (main request) and according to auxiliary requests 1 to 6 filed with the reply to the statement of grounds of appeal reads as follows:

"A method for separating solid particles of different densities in a magnetic process fluid, characterised in that the solid particles that differ little in density are separated by first thoroughly mixing the solid particles to be separated in a small partial flow of the process fluid, which small turbulent partial flow is added to a large laminar partial flow of the process fluid so that the turbulent partial flow is delimited by the laminar partial flow, after which the obtained mixture of the respective partial process fluids is conducted over, under, or through the middle of two magnet configurations, wherein the particles are separated into lighter particles at the top of the laminar process fluid and heavier particles at the bottom of the laminar process fluid, each of which are subsequently removed with the aid of a splitter wherein furthermore the materials of low density and the materials of high density are separated from the respective process streams."

IX. Independent **claim 9** according to the patent as maintained by the opposition division (main request), which corresponds to independent claim 9 according to the patent as granted, reads as follows:

"An apparatus (1) for separating a mixture of materials of little density differences in accordance with the method of any one of claims 1-8, characterised in that the apparatus (1) is provided with a mixing vessel (2) for the particles to be separated, which mixing vessel

(2) is provided with a stirrer (3) and an outlet for a turbulent partial process stream (4) containing the particles, and laminators (5) and (6) for creating a laminar process stream (8) delimiting the turbulent partial process stream (4), followed by a magnet for magnetizing the laminar process fluid stream (8), and a splitter (10) for removing a process fluid stream containing the lighter particles (11) on the one hand, and the heavier particles (12) on the other hand, whereby there is an equidirectionally rotating endless belt (9) for maintaining the laminar process fluid stream (8), and an equidirectionally moving trough-shaped endless belt (13) for removing the settled heavier particles and for maintaining the laminar process fluid stream (8)."

- X. Since the wording of independent claim 9 according to auxiliary request 1 to 6 filed with the reply to the statement of grounds of appeal and of the claims according to (conditional) auxiliary requests 1, 1A, 2A, 3A, 4A, 5A and 6A filed with letter of 5 March 2020 is not relevant for the present decision, there is no need to reproduce them here.

## Reasons for the Decision

1. *Revised Rules of Procedure of the Boards of Appeal (RPBA 2020) - Transitional provisions*

The appeal proceedings are governed by the revised version of the Rules of Procedure which came into force on 1 January 2020 (Articles 24 and 25(1) RPBA 2020), with the exception of Article 12(4) to (6) RPBA 2020 instead of which Article 12(4) RPBA 2007 remains applicable (Article 25(2) RPBA 2020).

2. *Main request - Amendments, Article 123(2) EPC*

- 2.1 The appellant argued (see pages 5 to 9 of the statement of grounds of appeal) that the following features added to independent apparatus claim 9 of the main request (which corresponds to claim 9 as granted) and to independent method claim 1 of the main request result in an amendment that extend beyond the original disclosure, contrary to Article 123(2) EPC:

"...a laminar process stream (8) **delimiting the turbulent partial process stream (4)**..." in claim 9, and"**... so that the turbulent partial flow is delimited by the laminar partial flow...**" in claim 1.

- 2.2 The amendment on claim 9 was considered allowable by the opposition division with respect to the requirements of Article 123(2) EPC (see points 2.2 and 8 of the reasons of the decision under appeal), specially in view of the following passages forming basis for such amendment:



- description page 4, lines 28-31,
- description page 6, lines 19-21 (Example 1), and
- description page 6, lines 36-38 (Example 2), and
- figure 1.

2.3 The appellant argued in paragraph 5 of page 8 of the statement of grounds of appeal that there was no basis in the original application for such an amendment. In particular, the appellant was of the view that the term "between two laminar stream strata" of the examples 1 and 2 in page 6, lines 20 and 38 cannot serve as a basis for the much broader term "delimiting the turbulent partial process stream".

Furthermore, other technical features of examples 1 and 2 strongly linked to "the two laminar stream strata" should be taken into account as well, such the mixing ratio of magnetic process fluid and solid particles, position of injection, *i.e.* at the height of the splitter, the rate of the fluid streams and the conveyor belts, the lingering time of the particles in the field up to the splitter.

2.4 The Board, substantially following the arguments of the appellant, is convinced that the incorporation of these features of the laminar process stream **delimiting** the turbulent partial process stream in claims 1 and 9 leads to an unallowable intermediate generalisation, contrary to the requirements of Article 123(2) EPC.

2.4.1 The term "delimiting" is to be understood as "setting the limit(s)". The Board is of the view that by this feature, the subject-matter of claims 1 and 9 of the main request covers **at least** the following technically

feasible configurations of the method and apparatus for which protection is sought:

(1) that the turbulent partial stream is injected and flows exclusively above a laminar partial stream (*i.e.* the laminar stream sets a lower limit to the turbulent stream);

(2) that the turbulent partial stream is injected and flows exclusively below a laminar partial stream (*i.e.* the laminar stream sets an upper limit to the turbulent stream); or

(3) that the turbulent partial stream is delimited between two strata of laminar flow (*i.e.* the laminar stream sets an upper and a lower limit to the turbulent stream).

2.4.2 The Board considers that subject-matter of claims 1 and 9 of the main request covers thus at least the two first possibilities (1) and (2) above, which cannot be directly and unambiguously derived from the original application. This results in an extension of subject-matter beyond the original application so that the requirements of Article 123(2) EPC are not met.

2.5 The respondent argued that the skilled person, when considering a claim, should rule out interpretations which are illogical or which do not make technical sense. He should try, with synthetic propensity, *i.e.* building up rather than tearing down, to arrive at an interpretation of the claim which is technically sensible and takes into account the whole disclosure of the patent. In the case at hand, the skilled person would indeed inevitably recognize when reading the specification and using the description and drawings to interpret the claims that the option in which the turbulent flow is delimited by two laminar strata is

the only option covered by the independent claims, so that the subject-matter of the claims does not extend beyond the original disclosure.

Additionally, the respondent indicated that in the cases where the turbulent flow was only delimited by the laminar flow only on one side, *i.e.* either above or below, the step of mixing the solid particles to be separated in a small partial flow of the process fluid, which small turbulent partial flow is added to a large laminar partial flow of the process fluid could not be carried out, so that the skilled person would immediately rule out these possibilities for being technically unfeasible.

For these reasons, the only possible interpretation of the claims, according to the respondent, was that the turbulent partial stream is delimited between two strata of laminar flow, so that no extension of the subject-matter beyond the original disclosure is apparent.

- 2.6 The Board is not persuaded by the argument of the respondent that there could be a technical incompatibility or unfeasibility of "adding" a small turbulent flow with the mixed particles to a large laminar flow that passes only above or below. The Board rather is convinced that there is no technical impediment to add the mixture of particles to be separated to a laminar flow falling under these situations. Furthermore, and in the absence of any proof that could demonstrate the correctness of the mere allegation of the respondent, the Board is of the view that a separation using the magnetic process fluid could be still be carried out, so that these possibilities are not deprived of technical sense.

2.7 It follows that the wording of claims 1 and 9 of the main request, specially relating to the feature of delimiting the laminar flow, is considered clear, its subject-matter makes technical sense and is devoid of any technical incorrectness or inaccuracies. Contrary to the view of the respondent, the description cannot be used to interpret the claims in any other way. A discrepancy between the claims and the description or in this case the further limitations that the description may suggest to the feature of delimiting the laminar flow, is not a valid reason to ignore the clear linguistic structure of a claim and to interpret it differently (see Case Law of the Boards of Appeal [CLB], 9th edition 2019, II.A.6.3.1, third paragraph and decision T 431/03, point 2.2.2 of the reasons).

3. *Auxiliary requests 1 to 6 filed with the reply to the statement of grounds of appeal - Amendments, Article 123(2) EPC*

The Board notes that at least the subject-matter of claim 1 according to any of auxiliary requests 1 to 6 contains the same feature that the turbulent partial flow is delimited by the laminar partial flow, as confirmed by the respondent at the oral proceedings before the Board, so that they also do not meet the requirements of Article 123(2) EPC for the same reasons as for the patent in the version as maintained by the opposition division (point 2 above).

4. *Admittance into the proceedings of (conditional) auxiliary requests 1, 1A, 2A, 3A, 4A, 5A and 6A filed with letter of 5 March 2020 - Articles 13(2) RPBA 2020 and 12(4) RPBA 2007*
- 4.1 Auxiliary requests 1, 1A, 2A, 3A, 4A, 5A and 6A were filed for the first time in appeal proceedings after arrangement of the oral proceedings. Thus, its admittance into the appeal proceedings is subject to Article 13(2) RPBA 2020. The appellant requested that these auxiliary requests not be admitted into the proceedings.
- 4.2 Article 13(2) RPBA 2020 states that any "amendment to a party's appeal case made ... after notification of a summons to oral proceedings shall, in principle, not be taken into account unless there are exceptional circumstances, which have been justified with cogent reasons by the party concerned."
- 4.3 Claim 1 of (conditional) auxiliary requests 1, 1A, 2A, 3A, 4A, 5A and 6A contain the additional feature "between two strata", which was not previously claimed. Therefore, these requests clearly amount to an amendment of the respondent's appeal case.
- 4.4 The respondent argued that exceptional circumstances did exist in the present case, as the preliminary opinion of the Board in its communication according to Article 15(1) RPBA 2020 deviated from the findings of the opposition division, in particular by indicating the the possibilities that were covered by the claims. The respondent further argued that the amendment was a simple and straightforward limitation which did not increase the complexity of the case and that furthermore would overcome all deficiencies.

- 4.5 The Board, in line with the established case law, is of the view that in the present case no exceptional circumstances have arisen by the preliminary opinion of a Board, which did not raise a new objection but merely arrived at a different conclusion to that given in the decision under appeal (T 2608/17, point 4 of the reasons).
- 4.6 In the present case, the objection under Article 123(2) EPC had been raised and substantiated by the appellant in its statement of grounds of appeal, page 8, fifth paragraph, that the term "between two laminar strata" could not serve as a basis for the much broader (claimed) term "delimiting the turbulent partial process stream". With its preliminary opinion, the Board merely elaborated on this objection and illustrated for the sake of the argument three possible (and non-exhaustive) configurations that were covered by the claims, whereby two had not been originally disclosed. Such a discussion on the subject-matter covered by the different features cannot constitute a surprising situation that a party cannot reasonably expect. The Board is consequently convinced that no unforeseen developments had taken place during the appeal proceedings that constitute cogent reasons that could justify exceptional circumstances in the sense of Article 13(2) RPBA 2020.
- 4.7 Article 12(3) RPBA 2020, which essentially corresponds to Article 12(2) RPBA 2007, requires that parties present their complete appeal case at the start of the appeal proceedings. In the present case, the Board is convinced that the respondent could and should have presented its complete case at least with its reply to the statement of grounds appeal, rather than waiting to

receive the preliminary opinion of the Board and filing new requests at a late stage of the appeal proceedings.

4.8 In addition, as the same objection under Article 123(2) EPC had already been raised by the appellant and dealt with by the opposition division during opposition proceedings (see notice of opposition, page 8 and points 2.2 and 8 of the reasons for the decision under appeal), so that the respondent could and should have submitted auxiliary requests overcoming this objection already during opposition proceedings. Hence the filing of (conditional) auxiliary requests 1, 1A, 2A, 3A, 4A, 5A and 6A only at the appeal stage with letter of 5 March 2020 would also be critical under Article 12(4) RPBA 2007.

4.9 In view of the above, **(conditional) auxiliary requests 1 and 1A to 6A filed with letter of 5 March 2020 are not admitted into the appeal proceedings.**

## 5. *Conclusions*

5.1 It follows that the appellant has convincingly demonstrated the incorrectness of the decision under appeal that the patent could be maintained on the basis of the then auxiliary request 1 (maintained version), in particular of the findings as regards Article 123(2) EPC. The decision under appeal must be set aside.

5.2 Furthermore, in the absence of any admissible or in its substance allowable request, *i.e.* auxiliary requests 1 to 6 filed with the respondent's reply to the appellant's statement of grounds of appeal for the same reason as the main request and (conditional) auxiliary requests 1, 1A, 2A, 3A, 4A, 5A and 6A filed with letter dated 5 March 2020, the patent must be revoked.

**Order**

**For these reasons it is decided that:**

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

The Registrar:

The Chairman:



G. Nachtigall

I. Beckedorf

Decision electronically authenticated