

Internal distribution code:

- (A) [-] Publication in OJ
- (B) [-] To Chairmen and Members
- (C) [-] To Chairmen
- (D) [X] No distribution

**Datasheet for the decision
of 23 March 2023**

Case Number: T 1227/21 - 3.2.07

Application Number: 17182187.9

Publication Number: 3263231

IPC: B07B13/10

Language of the proceedings: EN

Title of invention:
METHOD OF SEPARATING PARTICLES

Patent Proprietor:
ADR Technology B.V.

Opponents:
SGM Magnetics S.p.A.
KM Key Machinery GmbH

Headword:

Relevant legal provisions:
EPC Art. 100(c), 100(b), 83, 100(a), 54, 56
EPC R. 115(2)
RPBA 2020 Art. 12(3), 12(6), 13(2), 15(1), 15(3)

Keyword:

Oral proceedings - held in absence of party
Late-filed objection - should have been submitted in first-
instance proceedings (yes) - admitted (no)
Grounds for opposition - insufficiency of disclosure (no) -
lack of patentability (no)
Novelty - (yes)
Inventive step - (yes)
Statement of grounds of appeal - party's complete appeal case
Amendment after summons - exceptional circumstances (no) -
cogent reasons (no) - taken into account (no)

Decisions cited:

T 0182/89, T 0019/90

Catchword:



Beschwerdekammern
Boards of Appeal
Chambres de recours

Boards of Appeal of the
European Patent Office
Richard-Reitzner-Allee 8
85540 Haar
GERMANY
Tel. +49 (0)89 2399-0
Fax +49 (0)89 2399-4465

Case Number: T 1227/21 - 3.2.07

D E C I S I O N
of Technical Board of Appeal 3.2.07
of 23 March 2023

Appellant: KM Key Machinery GmbH
(Opponent 2) Wachsenegg 3
87477 Sulzberg (DE)

Representative: Patentanwaltzkanzlei Hutzelmann
Schloß Osterberg
89296 Osterberg (DE)

Respondent: ADR Technology B.V.
(Patent Proprietor) Mekelweg 4
2628 CD Delft (NL)

Representative: V.O.
P.O. Box 87930
Carnegieplein 5
2508 DH Den Haag (NL)

Party as of right: SGM Magnetics S.p.A.
(Opponent 1) Via Leno 2/D
25025 Manerbio (BS) (IT)

Representative: Concone, Emanuele
Società Italiana Brevetti S.p.A.
Via Carducci 8
20123 Milano (IT)

Decision under appeal: **Decision of the Opposition Division of the
European Patent Office posted on 28 May 2021
rejecting the opposition filed against European
patent No. 3263231 pursuant to Article 101(2)
EPC.**

Composition of the Board:

Chairman I. Beckedorf
Members: A. Cano Palmero
 V. Bevilacqua

Summary of Facts and Submissions

- I. Opponent 2 (appellant) lodged an appeal within the prescribed period and in the prescribed form against the decision of the opposition division rejecting the oppositions against European patent No. 3 263 231.
- II. Two oppositions were filed, which were directed against the patent in its entirety and based on all grounds for opposition pursuant to Article 100 EPC.
- III. In preparation for oral proceedings, scheduled upon the requests of the appellant and of the patent proprietor (respondent), 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 dismissed.
- IV. In response to the communication under Article 15(1) RPBA 2020, opponent 1 (party as of right) announced with letter of 6 February 2023 that it did not intend to attend the oral proceedings. The appellant submitted arguments in the substance with letter dated letter of 20 March 2023 to which a letter dated 18 December 2022 and new documents were attached.
- V. Oral proceedings before the Board took place on 23 March 2023 in the absence of opponent 1 in accordance with Rule 115(2) EPC and Article 15(3) RPBA 2020.

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

VI. The appellant requested

that the decision under appeal be set aside and
that the patent be revoked in its entirety.

VII. The respondent requested

that the appeal be dismissed, *i.e.* that the patent
be maintained as granted,

or, in the alternative,

when setting aside the decision under appeal,
that the patent be maintained in amended form
according to one of the sets of claims filed as
auxiliary requests 1 to 11 with the reply to the
statement of grounds of appeal.

VIII. Opponent 1, as party as of right (Article 107 EPC), has
filed neither submissions nor requests.

IX. The following **documents** referred to in the decision
under appeal are mentioned in the present decision:

E1: DE 94 19 448 U1;

E2/D19: US 2,095,385 A;

E3: EP 1 676 645 A1;

E4: DT 2 436 864 A1;

E5: US 3,757,946 A.

X. The following **documents** were filed by the appellant
after notification of the summons to oral proceedings
before the Board:

- D24:** "Gutachtliche Stellungnahme zum Patentstreit ADR Technology B.V. / KM Key Machinery GmbH";
- D25:** Slides of the presentation "Abfall zu Abfall - wie aus HMV Schlacke das zugelassene OFA Dichtungsmaterial TREAmIn® wurde", ICP Tagung;
- D26:** Article "Wertstoffgewinnung aus KVA-Rostasche";
- D27:** "Aschen aus der Müllverbrennung - Baustoff auf Deponien oder Abfall zur Ablagerung?", Bayerisches Landesamt für Umweltschutz;
- D28:** "The use of advanced dry recovery in recycling fine moist granular materials".

XI. The lines of argument of the parties relevant for the present decision are dealt with in detail in the reasons for the decision.

XII. Independent **claim 1** of the **patent as granted** reads as follows:

"Method of separating from a particle stream originating from waste-incineration ashes at least a first fraction with particles of a first group of dimensions, and a second fraction with particles of a second group of dimensions, wherein the first fraction pertains to particles having smaller dimensions, and the second fraction pertains to particles having relatively larger dimensions, in which method a separation-apparatus (1) is used to classify metals from said ashes into the first and the second fraction, and wherein the separation-apparatus (1) comprises an infeed-device (2) for the particle-stream (4), a rotatable drum (5) having at its circumference (13) plates (6, 6'), each plate having a radially extending hitting surface (6, 6') for the particles, at least a first receiving area (11, 11') proximal to the drum (5) for receipt therein of particles of the first fraction,

and at least a second receiving area (12, 12') distant from the drum (5) for receipt therein of particles of the second fraction, the apparatus further having a housing (6) so as to protect the particles (3) from outside weather-conditions, allowing that the particles (3) of the particle-stream (4) to be processed by said apparatus (1) have dimensions in the range 0-15 mm."

XIII. Independent **claim 4** of the **patent as granted** reads as follows:

"Use of a separation-apparatus (1) for separating from a particle-stream (4) originating from waste-incineration ashes at least a first fraction with particles (3) of a first group of dimensions, and a second fraction with particles (3) of a second group of dimensions, the first fraction pertaining to particles having smaller dimensions, and the second fraction pertaining to particles having relatively larger dimensions, the separation-apparatus comprising an infeed-device (2) for the particle-stream (4), a rotatable drum (5) having at its circumference (13) plates (6, 6'), each plate having a radially extending hitting surface (6, 6') for the particles, at least a first receiving area (11, 11') proximal to the drum (5) for receipt therein of particles of the first fraction, and at least a second receiving area (12, 12') distant from the drum (5) for receipt therein of particles of the second fraction, the apparatus having a housing (6) so as to protect the particles (3) from outside weather-conditions, allowing that the particles (3) of the particle-stream (4) to be processed by said apparatus (1) have dimensions in the range 0-15 mm."

XIV. As the auxiliary requests 1 to 11 do not form part of this decision, it is not necessary to reproduce them here.

Reasons for the Decision

1. *Added subject-matter - Admittance of the objections, Article 12(6) RPBA 2020*
- 1.1 The appellant submitted on page 1 of the statement of grounds of appeal that the subject-matter of claim 1 of the patent as granted extends beyond the content of the originally filed application, since the slide plate, which had been disclosed as an essential part of the infeed-device, is absent in claim 1 as granted.
- 1.2 The Board notes that this **objection** has been raised for the first time in appeal proceedings. According to Article 12(6), second sentence, RPBA 2020, the Board shall not admit requests, facts, **objections** or evidence which should have been submitted in opposition proceedings, unless the circumstances of the appeal case justify their admittance.
- 1.3 The appellant argued during the oral proceedings before the Board that the ground for opposition pursuant to Article 100(c) EPC had been admissibly raised in opposition proceedings by opponent 1. Therefore, the objection raised with the statement setting out the grounds of appeal, based on the same ground for opposition could not be seen as late-filed.

- 1.4 The Board disagrees. While it can be agreed with the appellant that the ground of opposition under Article 100(c) EPC cannot be regraded as a fresh ground, the relevant issue in the case at hand is whether the **objection** referred to in point 1.1 above had been submitted in opposition proceedings to allow the respondent to take position on it and the opposition division to decide on the matter. This is however not the case here, at least this has not been demonstrated by the appellant, who merely relied in the fact the opposition was based *inter alia* on the corresponding ground for opposition. Rather, the objections for added subject-matter raised by opponent 1 and decided upon by the opposition division in the decision under appeal concerned other matters (see point 1 of the Reasons for the decision under appeal) than the alleged intermediate generalisation raised by the appellant in appeal.
- 1.5 It follows that in the absence of any justifying circumstances submitted by the appellant, the Board does not admit the above objection into the appeal proceedings under Article 12(6), second sentence, RPBA 2020.
2. *Documents D24 to D28 - Admittance, Article 13(2) RPBA 2020*
 - 2.1 It is undisputed that the appellant submitted documents D24 to D28 after notification of the summons to oral proceedings before the Board.
 - 2.2 The appellant argued that these documents do not constitute an amendment to the appellant's appeal case, but merely illustrate how individual facts of the patent in suit are to be technically understood and how

the statements made in the patent in suit, in the opposition proceedings and also in the present appeal proceedings are to be assessed.

2.2.1 The appellant further indicated at the oral proceedings before the Board that these documents were filed as a reaction to the preliminary opinion of the Board, and that therefore could not have been submitted at an earlier stage.

2.3 The Board disagrees. According to Article 12(3) RPBA 2020, the statement of the grounds of appeal shall contain an appellant's complete appeal case, and it shall set out clearly and concisely the reasons why it is requested that the decision under appeal (in this case the rejection of the oppositions) be reversed, and should specify expressly *inter alia* all the facts, objections, arguments and evidence relied on. The Board thus can only see the filing of document D24 to D28 and the arguments based on these documents as an amendment to the appellant's appeal case.

2.3.1 According to Article 13(2) RPBA 2020, 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.

2.3.2 The Board concurs in the first place with the respondent that, as the main object of both opposition as appeal proceedings is the subject-matter of the claims as granted, documents D24 to D28 and the arguments based on these documents could and should have been submitted earlier, during opposition

proceedings or at the latest with the statement setting out the grounds of appeal.

2.3.3 In the second place, the Board is convinced that the preliminary opinion issued with the communication under Article 15(1) RPBA 2020 cannot amount to cogent reasons that could justify exceptional circumstances for the late submissions, since in this preliminary opinion the Board substantially concurred with the findings of the decision under appeal, without raising new issues *ex officio*.

2.4 Consequently, in the absence of any exceptional circumstances, **documents D24 to D28 and the corresponding arguments based on these documents are not are not taken into account under Article 13(2) RPBA 2020.**

3. *Sufficiency of disclosure, Articles 100(b) and 83 EPC*

3.1 The appellant argued in its statement setting out the grounds of appeal that the patent as granted is not sufficiently disclosed.

3.1.1 In paragraph 5 of page 2 of the statement of grounds of appeal the appellant holds that, although the housing of claim 1 as granted could protect the particles of the particle-stream from the outside weather conditions, such housing does not allow the processing of particles having dimensions in the range of 0 to 15 mm. According to the appellant (see last paragraph of page 2 of the statement of grounds of appeal), the provision of this housing, which is always foreseen in this kind of separation apparatuses due to pollution control and safety requirements, is independent from the size of the particles to be separated. Although the

patent assumes that only by providing a weather protection the possibility of separating a particle stream with particle sizes between 0 and 15 mm is created, the patent is silent on exactly how this possibility is actually realised (see paragraphs 4 and 5 of page 3 of the statement of grounds of appeal).

3.1.2 In addition, the appellant also indicated that the patent in suit fails to provide information of any kind on how the waste-incineration ashes and bottom ashes differ from any other mix of particles and what requirements must meet a separation apparatus in order to be suitable for treating such waste-incineration ashes.

3.2 The Board is not persuaded by the arguments of the appellant and concurs substantially with the findings of the opposition division of points 2.2 and 2.3 of the reasons for the decision under appeal that the requirements of Article 83 EPC are fulfilled.

3.2.1 In particular, the Board notes that it is established jurisprudence of the Boards of Appeal that an objection of lack of disclosure presupposes that there are serious doubts substantiated by verifiable facts. **The burden of proof is upon the opponent** to establish on the balance of probabilities that a person skilled in the art, using his common general knowledge, would be unable to carry out the invention (see the Case Law of the Boards of Appeal of the European Patent Office, 10th edition, 2022, II.C.9, first two paragraphs, in particular in relation to T 19/90 and T 182/89).

In the Board's view, the assertion of the appellant, that the housing does not contribute to allowing particles of the claimed size to be separated remains a

mere allegation which cannot substantiate serious doubts. In this sense, the Board concurs with the findings in point 2.2 of the decision under appeal that such housing is described in figure 1 and paragraph [0029] of the patent in suit.

3.2.2 With regard to the alleged lack of information on which features are mandatory in a separating apparatus suitable for treating waste-incineration ashes, the Board again fails to recognise any admissible serious doubt, substantiated by verifiable facts, that the skilled person cannot perform the claimed method and use a separation-apparatus for separating particles originated from waste-incineration ashes.

3.3 In sum, the Board concludes that the appellant has not demonstrated, through convincing and/or admissible arguments, the incorrectness of the decision under appeal that the ground for opposition under Article 100(b) EPC does not prejudice the maintenance of the patent as granted.

4. *Novelty, Articles 100(a) and 54 EPC*

4.1 With the letter dated 18 December 2022 and at the oral proceedings before the Board, the appellant indicated for the first time in appeal proceedings that document D19 (E2) disclosed on page 3, column 1, lines 49 to 55, that the separation method of this document considered "cinders" as a possible material to be treated.

4.1.1 The admittance under Article 13(2) RPBA 2020 of this new line of argument was contested by the respondent as being an amendment to the appellant's case made after notification of the summons.

- 4.1.2 The Board, for similar reasons as for documents D24 to D28 (see point 2 above) decides, in the absence of a change of the object of the appeal and in the absence of cogent reasons that could justify exceptional circumstances for this amendment, not to take this new line of argument into account under Article 13(2) RPBA 2020.
- 4.2 The appellant argued in the second paragraph on page 6 of the statement of grounds of appeal that all the separation processes and devices known from documents E1, E2, E3 , E4 and E5 anticipate the subject-matter of claims 1 and 4 of the patent as granted.
- 4.2.1 In support for this, the appellant argued in first place that the features relating to the **waste-incineration ashes** do not provide a technical contribution to the teaching of the invention and are therefore not to be considered when examining novelty.
- 4.2.2 Secondly, the appellant was of the view that in the known separating methods of E1 to E5, which are based on the particle weight, the particles are also separated **according to their dimensions** in the sense of claims 1 and 4 as granted if the particles have the same or a similar density.
- 4.3 The Board disagrees with the appellant's view for the following reasons.
- 4.3.1 The Board notes that claims 1 and 4 of the patent as granted are directed to a method and a use of a separation apparatus respectively, and that no protection is sought for an entity such as a separating apparatus. As correctly found by the opposition division in points 3.1.1 and 3.1.2, the choice of the

particle stream to be separated is without any doubt a feature provided with a technical character, as it is a step that delimits the scope of protection sought for both method and use of an apparatus. This is independent of the question whether the waste-incineration ashes could present similar properties to other particle streams, or whether a known apparatus could be suitable for separating waste-incineration ashes. As none of documents E1 to E5 deal with the **separation of particles originating from waste-incineration ashes**, the subject-matter of claims 1 and 4 as granted is new alone for this reason, as correctly concluded by the opposition division in point 3.2 of the reasons for the decision under appeal.

- 4.3.2 For the sake of completeness, the Board does not agree with the appellant that a separating process based on the dimension of the particles as claimed can be equated to a separating process based on the weight of the particles, so that this constitutes a further distinguishing feature with respect to the available prior art.
- 4.4 It follows from the above that the appellant has not provided convincing and/or admissible arguments that could demonstrate the incorrectness of the decision under appeal that the ground for opposition under Article 100(a) EPC (novelty) does not prejudice the maintenance of the patent as granted.
- 5. *Inventive step starting from E2 as closest prior art in combination with the common general knowledge, Articles 100(a) and 56 EPC*
- 5.1 The appellant brought forward on pages 6 and 7 of the statement of grounds of appeal that the subject-matter

of claims 1 and 4 as granted would solely differ from the known method and use of a separating apparatus of E2 in that particles originating from **casting sand** instead from **waste-incineration ashes** are separated. The skilled person, being confronted with the problem of having to separate waste-incineration ashes will therefore immediately recognise that the material mixture properties of casting sand are identical to those of the waste-incineration ashes and that the separation process described in E2 and the associated device can therefore also be used, without modification, for waste-incineration ashes, thereby arriving at the subject-matter of claims 1 and 4 without exercising an inventive skill.

- 5.2 The Board is not persuaded by the appellant's view for the following reasons.
- 5.2.1 It is in first place doubtful that casting sand presents **identical** properties as waste-incineration ashes. In the absence of any proof provided by the appellant, this remains a mere unsubstantiated allegation.
- 5.2.2 In second place, it can be agreed with the respondent (see second full paragraph on page 10 of the reply to the statement of grounds of appeal) that the formulation of the technical problem as separating waste incineration ash, is entirely based on hindsight, so that the skilled person, starting from E2, would only arrive at the subject-matter of the independent claims resulting from an *ex post facto* analysis.
- 5.2.3 More importantly, the Board concurs with the respondent and with the findings of the opposition division at point 4.3.1 of the reasons for the decision under

appeal that E2 discloses the separation of sand and metal **based on their weight**, whereas the method and the use defined in claims 1 and 4 refer to the separation of particles **based on their dimensions**. As already pointed out in point 4.3.2 above, the separation process based on the particle dimensions cannot be equated to a separation process based on the weight of the particles. In this regard, the skilled person would have no reason to deviate from the separation based on weight of the apparatus of E2 and apply a separation based on the particle size, with all the arrangements needed thereof.

5.2.4 In sum, the Board concludes that the subject-matter of claims 1 and 4 of the patent as granted is inventive in view of E2 alone.

6. *Conclusion*

In view of the above, the Board concludes that the appellant has not convincingly demonstrated the findings of the decision under appeal, that none of the grounds for opposition pursuant Article 100 EPC prejudices the maintenance of the patent as granted. The appeal is thus to be dismissed.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



G. Nachtigall

I. Beckedorf

Decision electronically authenticated