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**Datasheet for the decision
of 16 June 2020**

Case Number: T 2280/15 - 3.2.07

Application Number: 09770482.9

Publication Number: 2297011

IPC: B65G53/30, B65G53/14, B22F9/08

Language of the proceedings: EN

Title of invention:

METHOD AND DEVICE FOR OUTPUT OF GRANULATE FROM THE BOTTOM OF A
TANK THAT IN ADDITION TO GRANULATE HOLDS LIQUID

Applicant:

Uvån Holding AB

Headword:

Relevant legal provisions:

EPC Art. 52, 54, 56, 113(1), 116(1), 123(2)
RPBA 2020 Art. 12(8)

Keyword:

Amendments - allowable (yes)
Main request -Novelty (yes)
Main request - Inventive step (yes)

Decisions cited:

T 0172/82

Catchword:



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Case Number: T 2280/15 - 3.2.07

D E C I S I O N
of Technical Board of Appeal 3.2.07
of 16 June 2020

Appellant: Uvån Holding AB
(Applicant) Bockstigen 1
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Representative: Johansson, Lars E.
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Decision under appeal: **Decision of the Examining Division of the
European Patent Office posted on 4 September
2015 refusing European patent application No.
09770482.9 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman I. Beckedorf
Members: K. Poalas
A. Cano Palmero

Summary of Facts and Submissions

- I. The applicant (appellant) lodged within the prescribed time limit and in the prescribed form an appeal against the decision of the Examining Division refusing European patent application No. 09 770 482.9 being published as international publication WO-A-2009/157857 (D0).
- II. The Examining Division held that
claims 1 of the main request and of auxiliary requests 1 to 3 filed with letter dated 22 July 2015 are not in compliance with the requirements of Article 123(2) EPC;
claims 4 of auxiliary requests 2 and 3 are not in compliance with the requirements of Article 123(2) EPC,
the subject-matters of claim 4 of the main request and of auxiliary request 1 are not novel over the disclosure of D1 (US 1 598 558 A);
the subject-matters of claim 1 of the main request and of auxiliary requests 1 and 2 do not involve an inventive step in view of the teaching of D1 in combination with the teaching of D2 (US 4 294 784 A).
- III. At the outset of the proceedings the applicant sought the grant of a patent on the basis of one of the sets of claims filed with letter dated 22 July 2015 as main request and as auxiliary requests 1 to 3. The applicant also requested that the appeal fee be reimbursed. Oral proceedings were requested as an auxiliary measure.
- IV. In a telephone conversation between the applicant's representative and the rapporteur on 9 January 2020 the

applicant was informed that the Board could not establish a substantial procedural violation as argued by the applicant and that it intended therefore to not allow the applicant's request for reimbursement of the appeal fee. The applicant was further informed about the Board's provisional positive opinion regarding the allowability of the independent claims 1 and 4 of the main request. The filing of eventually amended claims and of an adapted description was also discussed with the applicant.

- V. With the letters dated 11 February 2020, 14 February 2020 and 30 March 2020 the applicant withdrew the requests for reimbursement of the appeal fee and for oral proceedings and requested as its main request

that the decision under appeal be set aside and that a patent be granted on the basis of the description pages 1 to 6 filed with the letter dated 14 February 2020, claims 1 to 11 filed with the letter dated 11 February 2020, figures 1, 2 as originally filed.

- VI. The applicant's arguments contesting the decision of the examining division are dealt with in detail in the reasons for the decision.
- VII. Independent claim 1 of the main request reads as follows (amendments over the originally filed claim 3 are depicted in bold or struck through):

"1. A procedure for output of granulate **of metal or metal alloys** from the bottom of a tank (1) that besides granulate **of metal or metal alloys** contains liquid,

characterized in that the output is achieved by a tubular ejector (10) under the tank (1), that pressurized transport liquid is sprayed through a spray nozzle (13) into and through the ejector (10) while pulling along ~~precipitating~~ **the** granulate from the tank (1) into the ejector (10) and that pressurized gas is sprayed into the granulate liquid mixture before it leaves the ejector (10)".

Independent claim 4 of the main request reads as follows (amendments over the originally filed claim 5 are depicted in bold or struck through):

"4. A device for output of granulate **of metal or metal alloys** from the bottom of a tank that besides granulate **of metal or metal alloys** contains liquid, ~~characterized in that~~ **wherein** a tubular ejector provided under the tank (1) has a side inlet (11) for granulate, an end (12) with an inlet (13) for pressurized transport liquid, and a second end (15) with an inlet (16) for pressurized gas and downstream from that an outlet (18) for a three-phase flow of liquid, granulate and gas, **wherein the inlet (16) for pressurized gas is positioned such that the pressurized gas is sprayed into the granulate liquid mixture before it leaves the ejector (10)".**

Reasons for the Decision

Procedural aspects

1. The decision is taken in written proceedings after the withdrawal of the request for oral proceedings in accordance with Article 12 (8) RPBA 2020. The appellant's rights under Articles 113 and 116 EPC are observed.

Main request

2. *Amendments - Article 123(2) EPC*

- 2.1 *Claim 1*

- 2.1.1 Claim 1 corresponds to the combination of the originally filed claims 1 and 3 with the expression "precipitating" being deleted, whereby the granulate is specified as being "of metals or metal alloys" in accordance with the passages on page 1, lines 10 and 29, page 3, lines 36 to 37, and page 6, line 32, of the originally filed description, *i.e.* of D0.

- 2.1.2 Claim 4 corresponds to the combination of the originally filed claims 5 and the last feature of the original filed claim 3, whereby the granulate is specified as being "of metals or metal alloys" in accordance with the passages on page 1, lines 10 and 29, page 3, lines 36 to 37 and page 6, line 32 of D0.

- 2.1.3 Claims 2, 3 and 5 to 11 correspond to the renumbered originally filed claims 2, 4 and 6 to 12.

2.1.4 The description has been amended in order to include an acknowledgement of D1 and an adaptation to the wording of the claims.

2.1.5 As stated under point 2.1.1 above, the term "precipitating" has been deleted in claim 1. The Board follows in this respect the applicant's argument that "precipitating" means that a substance precipitates from a solution in solid form as a precipitate, which is an action that does not take place according to the present invention, see the paragraph bridging pages 3 and 4 as well as page 1, lines 10-30 of the originally filed description. Accordingly, the term "precipitating" would introduce an ambiguity in claim 1 contrary to the requirements of Article 84 EPC. It is an accepted praxis by the Boards of Appeal (see T 172/82, OJ EPO 1983, 493) that a technically incorrect term may be omitted from a claim in order to remove an ambiguity.

2.2 For the above-mentioned reasons, the requirements of Article 123(2) EPC are met.

3. *Novelty*

3.1 *Claim 1*

3.1.1 It is undisputed that none of the state of the art documents on file discloses a procedure for output of granulate of metal or metal alloys **from the bottom of a tank** that besides **granulate of metal or metal alloys** contains **liquid** having the characterising features of claim 1.

3.1.2 Accordingly, the subject-matter of claim 1 is novel.

3.2 *Claim 4*

- 3.2.1 Even if, for the sake of argument, it would be considered that the device known from D1 would be suitable for output of granulate of metal or metal alloys the following features of claim 4 are not known from D1.
- 3.2.2 Claim 4 requires the ejector to be positioned under the tank that besides granulate of metal or metal alloys contains liquid.
- 3.2.3 D1 discloses a hydraulic device comprising a tubular body including a pair of tubular sections 1 and 2 and a union 3, whereby section 2 curves upwardly at 16 to a position at any desirable place, which may be located at a considerable height above the level of the union 3, see page 1, lines 25-30 and 82-90. Furthermore, there is no bottom of the hopper 6 shown in the figures or mentioned in D1, see figures and page 1, lines 36-42. Considering that the tubular body of D1, i.e. the combination of the tubular sections 1 and 2 and the union 3, as the tubular ejector claimed in claim 1, then D1 fails to disclose, that the injector is positioned **under** a tank containing granulate of metal or metal alloys and liquid.
- 3.2.4 The examining division's consideration of the outlet of the ejector, i.e. of the tubular body of D1, to be positioned in the bend of the upwardly curved portion 16 of section 2 is based on an unsupported, unallowable and arbitrary definition of the tubular body of D1. Such a definition is not directly and unambiguously derivable from D1.

3.2.5 Claim 4 requires further that the inlet for pressurized gas is positioned such that the pressurized gas is sprayed into the granulate liquid mixture before it leaves the ejector.

3.2.6 D1 discloses on the other hand that the gas supply is provided via the nipple 13 and the intake opening 12 positioned rearwardly from the discharge end of the tapering discharge nozzle 10. The spraying of pressurized air into the mixture of liquid and granulate does not take place before it leaves the ejector, so that it is located upstream from the outlet of the discharge nozzle 10. Hence, D1 fails to disclose the feature of an ejector having a second end with an inlet for pressurized gas as defined in claim 4.

3.2.7 Hence, the subject matter of claim 4 is novel.

4. *Inventive step*

4.1 *Claim 1*

4.1.1 The examining division held that the subject-matter of claim 1 lacks an inventive step in view of the teaching of D1 in combination with the teaching of D2.

4.1.2 D1, which does not refer to granulate of metal or metal alloys at all, does not disclose obviously a procedure for output of granulate of metal or metal alloys from the bottom of a tank that besides granulate of metal or metal alloys contains liquid. Furthermore, as stated under points 3.2.2 to 3.2.6 above, D1 does not provide a tubular ejector under the tank and it also does not provide the step of spraying into the ejector a pressurized gas into the granulate liquid mixture

before it leaves the ejector.

4.1.3 On the other hand, although D2 refers to a procedure for output of granulate of metal or metal alloys from the bottom of a tank that besides granulate of metal or metal alloys contains liquid, the ejector (riser 8) known from D2 is not positioned under the tank (vessel 4).

4.1.4 Accordingly, even a theoretical combination of the teaching of D1 with the teaching of D2 cannot lead the person skilled in the art to the subject-matter of claim 1, since the positioning of a tubular ejector as claimed in claim 1 under the tank containing granulate of metal or metal alloys and liquid would be still missing.

4.1.5 For the above-mentioned reasons, the combination of the teaching of D1 with the teaching of D2 cannot render the subject-matter of claim 1 obvious to the person skilled in the art.

4.2 *Claim 4*

4.2.1 For the same reasons as presented under point 4.1 above concerning claim 1, even a theoretical combination of the teaching of D1 with the teaching of D2 cannot lead the person skilled in the art to the subject-matter of claim 4, since the positioning of a tubular ejector as claimed in claim 4 under the tank containing granulate of metal or metal alloys and liquid would be still missing.

4.2.2 For the above-mentioned reasons, the combination of the teaching of D1 with the teaching of D2 cannot render the subject-matter of claim 4 obvious to the person

skilled in the art.

5. No further objections have been presented by the examining division in the reasons for the decision which would prejudice the granting of the present application.

5.1 The Board sees no reason to raise any further objections.

5.2 As a consequence, the applicant has demonstrated in a convincing manner the incorrectness of the decision under appeal in respect of the main request, so that a patent may be granted in accordance with the main request.

