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**Datasheet for the decision
of 5 July 2019**

Case Number: T 2182/16 - 3.2.07

Application Number: 13177838.3

Publication Number: 2656928

IPC: B07B1/46

Language of the proceedings: EN

Title of invention:

Apparatus and method for separating solids from a solids laden drilling fluid

Applicant:

National Oilwell Varco, L.P.

Headword:

Relevant legal provisions:

EPC Art. 54(1), 76(1), 111(1), 123(2)

Keyword:

Divisional application - added subject-matter (no)
Amendments - extension beyond the content of the application as filed (no)
Novelty - main request (yes)
Remittal to the department of first instance - (yes)

Decisions cited:

Catchword:



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Case Number: T 2182/16 - 3.2.07

D E C I S I O N
of Technical Board of Appeal 3.2.07
of 5 July 2019

Appellant: National Oilwell Varco, L.P.
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Decision under appeal: **Decision of the Examining Division of the
European Patent Office posted on 26 April 2016
refusing European patent application No.
13177838.3 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman V. Bevilacqua
Members: G. Patton
R. Cramer

Summary of Facts and Submissions

- I. The applicant (appellant) lodged an appeal against the decision of the Examining Division to refuse the European patent application No. 13 177 838.3, which is a divisional application of the earlier European patent application No. 11 711 982.6.
- II. The examining division held that the subject-matter of claim 1 of the then single request was lacking novelty over each of the documents **D1**(=US 2 285 348 A), **D3**(=US 4 288 320 A) and **D7**(=US 2005/274652 A).
- III. With its appeal the appellant requested that the decision be set aside and a patent be granted on the basis of a new main request, alternatively, of a first to third auxiliary requests, all requests filed with the statement setting out the grounds of appeal.
- IV. With letter dated 3 June 2019, the appellant requested that the case be remitted to the Examining Division for further prosecution (main request), either with,
1. a direction that the claims of the main request are allowable and should be granted, or
 2. a direction that the claims of the main request overcome the objections relied upon by the Examining Division in the impugned decision, and further prosecution should be continued accordingly.

The request for oral proceedings was maintained in the event that none of the directions 1 or 2 of the main request would be granted.

The first to third auxiliary requests were maintained.

V. Independent claim 1 of the main request in appeal proceedings reads as follows:

"An apparatus for separating solids from solids laden drilling fluid, the apparatus comprising a shale shaker and a screen assembly (500), the shale shaker comprising a base and a basket (30) isolated from said base, a flow tray (501) arranged in said basket (30) for directing screened drilling fluid, the screen assembly (500) comprising at least one layer of screening material, a support (511) having a perimeter with a plurality of support points within said perimeter, characterised in that the flow tray (501) comprises a plurality of contours forming a plurality of raised portions (513a-e) for supporting said plurality of support points to support said screen assembly."

Independent claim 12 of the main request in appeal proceedings reads as follows:

"A method of using the apparatus as claimed in any of Claims 1 to 11, the method comprising the step of placing the screen assembly (500) in the basket (30) of the shale shaker, flowing solids laden drilling fluid on to the screen assembly (500), at least a proportion of the solids flowing over the screen assembly (500) and at least a proportion of said drilling fluid passing through said screen assembly (500)."

In view of the present decision, there is no need to recite the wording of the independent claims of the auxiliary requests.

VI. Since the claims of the main request are found to overcome the objections relied upon by the Examining

Division in the impugned decision, and further prosecution can be ordered accordingly, in accordance with the second alternative of the appellant's main request, oral proceedings originally scheduled for 2 July 2019 were cancelled.

Reasons for the Decision

1. Main request - amendments
 - 1.1 The amendments performed in claim 1 of the main request with respect to claim 1 of the application as originally filed are as follows (in bold the added features and in strike-through the deleted features, emphasis by the Board):

"An apparatus for separating solids from solids laden drilling fluid, the apparatus comprising a shale shaker and a screen assembly **(500)**, the shale shaker comprising a base and a basket **(30)** isolated from said base, a flow tray **(501)** arranged in said basket **(30)** for directing screened drilling fluid, the screen assembly **(500)** comprising at least one layer of screening material, a support **(511)** having a perimeter with ~~at least one~~ **a plurality of** support points within said perimeter, characterised in that the flow tray **(501)** comprises ~~at least one~~ **a plurality of contours forming a plurality of** raised portions **(513a-e)** ~~to~~ **for supporting said plurality of support points to support** said screen assembly."
 - 1.2 The Board follows the appellant's view that claim 1 of the main request can be seen as resulting from the combination of original claims 1, 7 and 8 in view of

page 12, lines 5-10 of the original description, taking also into consideration the embodiments according to the invention as illustrated in Figures 4 to 8.

The other claims 2-12 of the main request are based on original claims 2-6 and 9-14.

Therefore, the set of claims according to the main request fulfils the requirements of Article 123(2) EPC.

The same applies vis-à-vis the earlier application.

A basis for claim 1 of the main request is provided in the earlier application in view of claims 1, 7 and 8, page 12, lines 10-15 and Figures 4 to 8 (see the A-publication WO 2011/135320 A).

A basis for claims 2-12 of the main request is given in the earlier application in view of claims 2-6, 9-12 and 23-24 and page 15, lines 19-29 (see the A-publication WO 2011/135320 A).

Therefore, the set of claims according to the main request fulfils the requirements of Article 76(1) EPC.

2. Main request - Novelty over D1, D3 and D7 - Article 54(1) EPC
- 2.1 **D1** (page 1, left-hand column, line 47 to page 2, left-hand column, line 60; Figures 1, 2 and 3) discloses an apparatus for the separation and grading of ores, minerals, grains and other materials (page 1, left-hand column, lines 1-4), i.e. an apparatus **suitable** for separating solids from solids laden drilling fluid, comprising
 - a shale shaker

the shale shaker comprising a base ("outriggers" 19) and a basket ("side members" 6, 9; "rods" 7, 10; "transverse members" 12, 13) isolated from said base (19),

- a screen assembly, comprising at least one layer of screening material ("screen cloth" 2)
 - a support, i.e. the basket, having a perimeter with a plurality of support points within said perimeter ("supports" 8, 11, Figures 2 and 3),
 - a flow tray ("conveying of collecting pans" 3) arranged in said basket for directing screened drilling fluid,
- and
- comprising a plurality of contours forming a plurality of raised portions ("longitudinal struts or supports for the screen cloths" 4, Figure 2).

D1 does not disclose directly and unambiguously that the raised portions (4) are

for supporting said plurality of support points [of the support] to support said screen assembly.

These features were added with respect to claim 1 that lays at the basis of the appealed decision.

As a matter of fact, the raised portions (4) in D1 support directly the screening material (2). Furthermore, the above-mentioned support points (8, 11) of the basket support the flow tray (3), i.e. not the other way around as claimed.

Hence, the subject-matter of claim 1 of the main request is novel over D1.

- 2.2 **D3** (column 3, lines 26-66; Figures 1, 2 and 5) discloses vibrating screens (column 1, lines 6-11), i.e. an apparatus **suitable** for separating solids from solids laden drilling fluid, comprising
- a shale shaker
the shale shaker comprising a base and a basket ("frame" 12) isolated from said base,
 - a screen assembly ("screen deck" 14, 16), comprising at least one layer of screening material
 - a support,
having a perimeter with a plurality of support points ("base unit" 40, 42; "support assembly" 30, 32, 34; "support bars" 50, 52, "cross braces" 44, 46; Figures 2 and 5) within said perimeter.

D3 does not disclose directly and unambiguously a flow tray

arranged in said basket for directing screened drilling fluid,
and
comprising a plurality of contours forming a plurality of raised portions for supporting said plurality of support points to support said screen assembly.

Hence, the subject-matter of claim 1 is also novel over D3.

- 2.3 **D7** (paragraphs 14, 18, 19; Figures 1-6) discloses vibratory screening machines and conveyors (paragraph 1), i.e. an apparatus **suitable** for separating solids from solids laden drilling fluid, comprising
- a shale shaker

- the shale shaker comprising a base and a basket ("support frame" 40) isolated from said base,
- a screen assembly, comprising at least one layer of screening material ("sieve mat" 200; "strips" 202, 204, 206, 208, 210...240)
- a support, having a perimeter with a plurality of support points within said perimeter ("transverse mat supports" 302, 304, 306, 308, 310... 342).

D7 does not disclose directly and unambiguously a flow tray

arranged in said basket for directing screened drilling fluid,
and
comprising a plurality of contours forming a plurality of raised portions for supporting said plurality of support points to support said screen assembly.

Hence, the subject-matter of claim 1 is also novel over D7.

2.4 Since independent claim 12 comprises the apparatus of claim 1, the above reasoning and conclusions regarding novelty also apply *mutatis mutandis* to claim 12.

3. Remittal

In the decision under appeal only objections of lack of novelty against the subject-matter of claim 1 of the then single request vis-à-vis D1, D3 and D7 were raised, moreover only the one vis-à-vis D1 was reasoned pursuant to Rule 111(2) EPC.

Since the appeal proceedings consist essentially in revising the decision under appeal the Board considers it appropriate, also following the appellant's main request, to remit the case to the Examining Division for further prosecution pursuant to Article 111(1), second sentence, EPC.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the Examining Division for further prosecution.

The Registrar:

The Chairman:



G. Nachtigall

V. Bevilacqua

Decision electronically authenticated