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**Datasheet for the decision  
of 6 April 2016**

**Case Number:** T 1613/13 - 3.2.03

**Application Number:** 99913750.8

**Publication Number:** 1068403

**IPC:** E02D7/28, B63B21/27

**Language of the proceedings:** EN

**Title of invention:**

MARINE STRUCTURE

**Patent Proprietor:**

Suction Pile Technology B.V.

**Opponents:**

Technip France  
Overdick GmbH & co. KG

**Headword:**

**Relevant legal provisions:**

EPC Art. 54(1), 56  
EPC R. 106

**Keyword:**

**Decisions cited:**

**Catchword:**



**Beschwerdekammern**  
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Case Number: T 1613/13 - 3.2.03

**D E C I S I O N**  
**of Technical Board of Appeal 3.2.03**  
**of 6 April 2016**

**Appellant:** Suction Pile Technology B.V.  
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**Respondent:** Technip France  
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**Representative:** Gendron, Vincent Christian  
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**Decision under appeal:** Decision of the Opposition Division of the  
European Patent Office posted on 13 May 2013  
revoking European patent No. 1068403 pursuant to  
Article 101(3) (b) EPC.

**Composition of the Board:**

**Chairman**            G. Ashley  
**Members:**            Y. Jest  
                             M.-B. Tardo-Dino

## **Summary of Facts and Submissions**

- I. By its decision dated 13 May 2013 the opposition division revoked European Patent No. 1068403 on the grounds that the subject-matter of the main request and auxiliary requests 1, 2a, 3 to 5 and 5a lacked novelty, that the claims of auxiliary request 2 did not meet the requirements of article 123(2) EPC and that the subject-matter of auxiliary request 6 lacked inventive step as compared to the state of the art disclosed in document US-A- 4036161 (D1) in combination with the general knowledge of the person skilled in the art.
- II. The patentee, hereinafter the appellant, lodged an appeal on 12 July 2013 and paid the appeal fee on 16 July 2013. The statement of grounds was received on 19 September 2013.
- III. Requests
- (a) Appellant
- (i) With the grounds of appeal, the appellant requested that the decision of the opposition division to revoke the patent be set aside and that the patent be maintained in amended form on the basis of one of the auxiliary requests I, IIa, III to V, Va and VI refused by the opposition division. With the letter of 11 February 2016, the appellant replaced the requests on file by a new main request and new auxiliary requests 1 to 3.

(ii) During oral proceedings the appellant requested that the decision of the opposition division to revoke the patent be set aside, and that the patent be maintained in amended form on the basis of a single claim of the main request filed during oral proceedings, whereby this claim had previously been filed with the grounds of appeal as the claim of auxiliary request VI, and which had been refused by the opposition division.

(b) Respondent

(i) The opponent (hereinafter the respondent) requested that the appeal be dismissed.

(ii) At the end of the oral proceedings the respondent raised an objection in respect of a procedural defect with the following text:

*"Nous souhaitons soulever une objection devant la chambre pour violation de procédure, au sujet de la prise de décision sur l'admissibilité de la nouvelle requête principale soumise par la requérante au cours de la procédure orale. L'admissibilité a été actée par la chambre sans entendre nos arguments."*

(c) Other parties

The second opponent had withdrawn its opposition with letter of 31 March 2010 during the opposition proceedings and is therefore not party to the appeal proceedings.

An objection of lack of inventive step based on document GB-B-2292167 in combination with the general knowledge of the skilled person was filed on 22 October 2015 by a third party.

IV. The single claim of the request has the following wording:

"Method of installing a marine structure onto the sub-sea bottom by providing:  
a foundation part with one or more suction piles (1) for embedment into the sub-sea bottom (2); a construction above said foundation part, said construction having insufficient buoyancy to keep itself floating in a body of water, said construction being configured to bear on said foundation part when the marine structure is installed into the subsea bottom; buoyancy means providing buoyancy such that the overall structure has buoyancy sufficient such that the structure as a whole can be transported over water independently floating, particularly in an upright position; whereby the suction piles provide at least a part of the required buoyancy;  
allowing the overall structure to independently float into a body of water; and together lowering said foundation part and said construction by decreasing its buoyancy while floating in said body of water such that the suction piles are lowered onto the subsea bottom; wherein a gas is pumped or fed to suction piles while the overall structure floats into the body of water, to maintain or provide the buoyancy of said suction piles."

V. In the oral proceedings held on 6 April 2016, the board decided not to admit the requests filed with letter of 11 February 2016, but to admit into the proceedings a

single request filed in reaction to the board's decision by the appellant. The request filed during the oral proceedings formed the basis of a new main (single) request.

At the end of the oral proceedings the board announced its decision.

VI. The appellant submitted essentially the following arguments:

The request filed during the oral proceedings should be admitted into the proceedings. It corresponds to auxiliary request VI which was rejected by the opposition division for lack of inventive step; it also formed the basis of the request for maintenance of the patent according to auxiliary request VI, as filed with the grounds of appeal.

Finally the single claim of the request is based on the combination of the method claims 9 and 10 as granted and its wording is very similar to the sole claim of auxiliary request 3, filed with letter of 11 February 2016.

The claimed method differs from the state of the art disclosed in D1 at least by the step of pumping or feeding a gas into the suction piles while the overall structure floats into the body of water, to maintain or provide the buoyancy of said suction piles.

No indication is given in D1 of such a method step. The air-lift pump 15 disclosed in D1 has another function, namely it is provided for the extraction of air/water from within the interior of the submersible structure 10 for establishing proper anchoring, see figure 3, column 2, lines 21 to 28.



The person skilled in the art finds no incentive in D1 or in D10 ("Offshore Structure Modelling", published by: World Scientific Publishing Co. Pte. Ltd, P O Box 128, Farrer Road, Singapore 9128, Copyright 1994, pages 322 to 333) for feeding gas while floating/transport of the structure, even when taking general knowledge into account.

VII. In summary the respondent argued as follows:

The new main request introduced during oral proceedings is late filed and should not be admitted.

It was the appellant's choice and decision to replace the set of requests filed with the grounds of appeal by the four requests filed with letter of 11 February 2016. Since the board has decided not to admit these four requests, the case, in absence of an admissible request, should be terminated by rejecting the appeal.

The single claim did not meet the requirements of article 83/100(b) EPC because the claimed method was not sufficiently disclosed. The person skilled in the art had no clear teaching from the patent as to how to pump a gas into - in the claim broadly defined - suction piles while the overall structure floats into the body of water in order to maintain or provide the buoyancy of said suction piles.

The claimed method was known from D1 and therefore lacked novelty. The hollow anchorage structure 10 of D1 comprises a suction pile, i.e. the lower, large submerged part (see the figures), a construction part, i.e. the part over the water comprising the pump 15, and a foundation part located between the suction pile and the construction part, i.e. the smaller section shown in the drawings of D1 as partly submerged.

It was clear to the skilled reader that the function of the air-lift pump 15 was to pump air into the suction pipe of the structure 10 (column 1, lines 32 to 37) and consequently to increase the buoyancy of the structure, which, from a practical, technical point of view, was especially appropriate when the structure was floating. The claimed method was therefore anticipated by D1.

Furthermore, the step of pumping air into the suction pipe by means of the air-lift pump 15 was rendered obvious by D10 (figure 8.11; page 324, paragraph 8.5.1; page 325, second paragraph; page 326, equation (8.14) determining a volume of air  $V_r$ ), which disclosed how to vary the pressure/volume of air contained in a freely floating open-bottom can in order to adjust its buoyancy.

## **Reasons for the Decision**

1. Admissibility of the request
  - 1.1 The request of the appellant during the oral proceedings to reinstate one of the requests filed with the statement of grounds of appeal, after these had been replaced by the new requests (filed with letter of 11 February 2016) amounts, in terms of procedure, to the very late filing of a new request. The respondent contended that the appeal proceedings should be closed immediately and that the appeal be dismissed, since the board had not admitted the requests replacing those filed with the statement of grounds. According to the respondent there were no more requests on file, and no possibility for the board to allow the appellant to revert to a withdrawn request.

1.2 As stated above, the appellant's request to have one of its former requests considered had the status of a newly filed request, hence it was necessary for the board to consider the admissibility of this request as it would with any late filed request. In this particular case, however, besides the criteria set out in Article 13 (1)RPBA, the board had also to consider whether the fact that the newly filed request resulted in reverting to a request previously withdrawn during the appeal proceedings was per se a reason not to admit the request.

1.3 Regarding the criteria set out in Article 13(1) RPBA the board took the following aspects into consideration.

1.3.1 The history of the request

In its preliminary opinion the board requested the appellant to clarify the state of the requests submitted with the grounds of appeal, and to submit marked and clear copies of the different sets of claims forming the basis of the requests.

The board further indicated that it was not persuaded by the reasoning and conclusion given in the contested decision for lack of inventive step of the method defined in auxiliary request VI.

With letter of 11 February 2016 the appellant replaced the requests initially filed with the grounds of appeal by a new main request and new auxiliary requests 1 to 3. During the oral proceedings the appellant requested the opportunity to file again the requests filed with the grounds of appeal, should none of the new requests be deemed admissible.

During the discussion of the admissibility of the new requests, the board, after hearing the respondent, noted that an unclear feature had been taken from the description and introduced into the claims of all the new requests; the board therefore decided that the new requests would not be admitted.

When the appellant requested the reintroduction of the requests filed with the statement of grounds, the board expressed the view that, if any, only a request corresponding to auxiliary request VI could potentially be admitted into the proceedings for the reasons given in point 3 of the provisional opinion.

The appellant then replaced the requests filed with letter of 11 February 2016 by a sole request based on the single claim corresponding to the claim of said auxiliary request VI.

#### 1.3.2 The contents of the request

As stated above, the claim of this new request corresponds to that of auxiliary request VI, which had been dealt with both in the contested decision and the provisional opinion of the board. The subject-matter of the claim was thus familiar to the respondent.

In addition, the claim of the new request substantially corresponds to the method claim of the third auxiliary request filed with the letter of 11 February 2016, with the difference that the added feature ("*which suction piles are a thin walled steel cylinder, closed at the upper longitudinal end*") taken from the description was deleted in reaction to the objection of a prima facie lack of clarity introduced by this feature.

The definition of the method according to claim 1 of the request was thus not new in the proceedings and could be dealt with in the oral proceedings.

Under these circumstances the new request, in spite of being a late-filed request in the proceedings, did not in fact change the case as made out in the statement of grounds, and did not introduce further complexity; it could be dealt with by the respondent and the board without any delay. Accordingly the requirements of Article 13(1) and (3) RPBA were not an obstacle to the reintroduction of the request at this stage.

- 1.4 Then the board had to consider whether the fact that the new request corresponded to a withdrawn request was, in addition to the requirements of Article 13 RPBA, enough to render the request inadmissible.

There is no legal basis which would justify the non-admissibility of a request merely because it has been replaced by another. The board has a discretion to assess whether or not the withdrawal should be considered definitive, and whether the attempt to reintroduce the withdrawn request was justified or a misuse of proceedings. In this respect, the important point was that the request was part of the scope of the appeal, since it corresponded to auxiliary request VI examined by the opposition division and was filed with the statement of grounds of appeal. The new requests filed with the letter of 11 February 2016 were in reaction to the board's communication and an attempt to solve outstanding objections, these requests being announced as replacing the pending ones. It could have been expected that, in view of the communication of the board with respect to auxiliary request VI, in the event that the board found the new requests

inadmissible, the appellant would reintroduce an appropriate request. Rejecting this request merely because it was a consequence of the withdrawal in such circumstances would not comply with the spirit of the rules of procedure of the boards of appeal, Articles 12 and 13 in particular.

The result is that the board exercised its power of discretion and admitted the request into the proceedings.

2. Amendments

The request contains a single claim which is formed by the combination of the features of independent claim 9 and its dependent claim 10 as granted.

The requirements of article 123 EPC are fulfilled; the respondent did not raise an objection.

3. Article 100(b)/83 EPC

During opposition procedure the opponent (respondent) raised an objection under article 100(b) EPC that the terms "self founding" and "suction pile" were unclear to such an extent that neither of them could be reasonably interpreted, meaning that the invention as claimed could not be realised (see section 12.1 of the impugned decision).

During oral proceedings the respondent objected that there was an insufficient disclosure of the claimed method because the teaching of the last feature of the claim, i.e. the feature contained in claim 10 as granted and defining the step of feeding air into the suction pile(s), was not clear enough for the skilled person to carry it out.

This attack is thus a newly raised objection under article 100(b) EPC, as it does not relate to the objection raised in the opposition proceedings and dealt with by the opposition division in its decision.

Since the appellant expressed his refusal to the introduction of a fresh attack under article 100(b) EPC raised by the respondent during oral proceedings is not to be considered.

#### 4. Novelty

- 4.1 D1 discloses a method of installing a marine structure onto the sub-sea bottom (cf. col. 1, lines 59 to 61; Figures) by providing:
- a foundation part (the vertical thinner portion in the installed position shown in fig. 4 arranged between the water pump 15 and the subsea bottom, but above the platform-like structure 10). This part can be identified in the figures, and is mentioned in claim 6 of D1 as being adapted to act to form an attachment to or connection with an object to be anchored,
  - a suction pile (the "lower" portion of the structure 10, delimited by a horizontal upper wall, represents a suction pile within the meaning of the contested patent since it performs the same function, namely embedding the structure into the subsea bottom, see figure 4);
  - a construction above said foundation part; the air-lift pump 15 is considered to be a construction and is arranged above the foundation part, i.e. the vertical portion above the structure 10, see figures 1 to 4; alternatively D1 suggests the use of the anchorage structure 10 for supporting a substantial part of an oil rig platform, see column 2, lines 39 to 43;

- the construction is configured to bear on said foundation part when the marine structure 10 is installed into the subsea bottom and has insufficient buoyancy to keep itself afloat in a body of water (it cannot be said that a water pump 15 or an oil rig platform per se have buoyancy);
- buoyancy means providing sufficient buoyancy such that the structure as a whole can be transported over water, floating independently, particularly in an upright position (figures and column 1, lines 59 to 63), whereby the suction pile provides at least a part of the required buoyancy (it is implicit to the skilled reader that the floating ability of the overall structure is at least partly due to the suction pile itself, as it forms part of the anchorage structure 10, see also figure 1), allowing the overall structure to independently float into a body of water;
- and lowering together the foundation part and the construction by decreasing its buoyancy while floating in a body of water, such that the suction piles are lowered onto the subsea bottom (evolution of the position illustrated by figures 1 to 4 and described in column 1, lines 63 and 64).

Thus the device disclosed in D1 comprises a construction above the foundation part 10 in the form of a pump 15 or a substantial part of an oil rig platform (column 2, lines 39 to 43).

The explicitly defined function of the so-called "air-lift pump" is given at column 1, lines 32 to 37, namely the extraction of air/water from within the interior of the structure 10. This definition is in line with the text of column 1, line 64 to column 2, line 2, referring to the water to be expelled by either an "air-lift pump" or by a water jet ejector.



The water expelling apparatus, if able to handle solids, may even be used for burying the structure into the sea-ground (column 2, lines 39 to 43).

- 4.2 There is therefore no disclosure whatsoever in D1 to use the air-lift pump 15 for pumping or feeding gas into the suction pile of the structure 10 while the overall structure floats into the body of water, to maintain or provide the buoyancy of said suction piles.
- 4.3 The last step of the method defined in the single claim is thus not known from D1.  
The claimed method is therefore new as compared to D1 within the meaning of article 54(1) EPC.

5. Inventive step

5.1 D1 with general knowledge

- 5.1.1 The opposition division came to the conclusion that the method as claimed lacked inventive step when compared to D1 and the general knowledge of the person skilled in the art (see paragraph 17 of the impugned decision in which the division rejected auxiliary request 6 corresponding to the request now on file).

The board does not share the findings given in the contested decision because of the following considerations.

- 5.1.2 The board agrees with the opposition division's conclusion that the claimed method differs from D1 only in that a gas is pumped or fed into the suction pile while the overall structure already floats into the body of water. The board is however not convinced that the objective problem which is to be derived from the

distinguishing feature is to adjust the ascending speed of the marine structure after disengagement from the subsea bottom (see point 17.2.4 of the contested decision).

- 5.1.3 The purpose of the distinguishing method step is that the supplied gas maintains/provides buoyancy while the structure is floating and transported over water.

This function is further explained in column 2, lines 47 to 53 of the patent, where it is said that a gas supply refills the space in the suction pile in order to counteract ingress of water into the buoyancy space at the opened bottom of the suction pile, which results from movement of the floating and transported structure.

- 5.1.4 The board notes that D1 is silent on the transportation step of the structure and defines a different function for the air-lift pump, namely expelling air/water from the buoyancy space of the suction pile. The skilled person has thus no reason to provide the anchorage method derivable from D1 with such a countermeasure step in the absence of an appropriate hint from the state of the art.

- 5.2 D1 with D10

The person skilled in the art will not find a proper incentive in D10 ("Offshore Structure Modelling", published by: World Scientific Publishing Co. Pte. Ltd, P O Box 128, Farrer Road, Singapore 9128, Copyright 1994, pages 322 to 333) for feeding gas while floating/transport of the structure, even when taking general knowledge into account.

D10 merely relates to the modeling of an offshore structure, and in particular to the accurate modeling of freely floating air cans supporting a submersible rig. D10 does not disclose a method step directed to adjusting the buoyancy created by the air cans while the transported rig is floating.

The respondent's argument that the claimed method was obviously derivable for the person skilled in the art when combining the teachings of D1 and D10 therefore appears to result from an *ex post facto* analysis.

5.3 Other documents

The respondent did not refer to any other document in respect of the appellant's request.

5.4 The method of the single claim thus fulfils the requirement of article 56 EPC.

6. Third party's submission

First, it is not apparent from the content of the third party's submission dated 22 October 2015 which claim of which request is addressed by the objection.

Secondly, the cited document GB-B- 2292167 (GB) is clearly less relevant than the documents cited by the respondent, since the self-installing platform disclosed in GB lacks suction piles and requires instead the use of a barge and a hollow concrete base structure. The replacement of the base and barge structure by suction piles seems to be based on a pure *ex post facto* analysis.

In summary the third party's observations are not particularly relevant to the case and are therefore disregarded pursuant to Article 114(2) EPC.

7. Objection of a procedural defect

7.1 The respondent contended that the board did not give it any opportunity to discuss the admissibility of the appellant's request filed at the oral proceedings. This objection was raised when the chairman was confirming the final requests.

7.2 In order to assess whether this objection concerned a procedural error that the board could remedy, the following facts were taken into consideration.

There was a discussion about the admissibility of the request and the respondent's arguments were taken into account (see paragraph 2 above and paragraph 4 of the minutes of oral proceedings). When the appellant announced its intention to revert to its former request, it was made clear that only auxiliary request VI could be considered in order to avoid any unreasonable requests which would have delayed the proceedings. The proceedings were interrupted to allow the appellant to print copies of the request.

The discussion about admissibility took place prior to the interruption for printing copies of the request, since the subject-matter of the request was already known, with the appellant emphasising the similarities between the reintroduced request, auxiliary request III filed with the letter of 11 February 2016 and auxiliary request VI filed with the statement of grounds.

At resumption, the respondent was given the floor to comment on the request, and immediately raised an objection under Article 83 EPC.

The board was given no indication that the respondent had something further to add to its admissibility objections raised prior to the interruption. This would have been the appropriate time to remedy any alleged deficiency in right to be heard about admissibility issues.

The respondent raised its objection after the discussion on the substantive merits of the request and the announcement of the board's conclusion in these respects.

However, in the board's view the respondent had not been deprived of its right to be heard on admissibility, and there was no reason to reopen the discussion on the issue, which at the time it took place was not challenged.

Therefore the objection was dismissed.

## **Order**

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

1. The objection of procedural violation is dismissed.
2. The decision under appeal is set aside and the case is remitted to the opposition division with the order to maintain the patent on the basis of:
  - the claim of the main request filed during the oral proceedings,
  - a description and figures to be adapted.

The Registrar:

The Chairman:



C. Spira

G. Ashley

Decision electronically authenticated