DECISION
of 27 May 2004

Case Number: T 0750/02 - 3.2.1

Application Number: 94305860.2

Publication Number: 0661488

IPC: F16L 1/19, F16L 1/20, F16L 1/225

Language of the proceedings: EN

Title of invention: Apparatus for near vertical laying of pipeline

Patentee: McDERMOTT INTERNATIONAL, INC.

Opponent: SAIPEM LUXEMBOURG S.A.

Headword: 

Relevant legal provisions: EPC Art. 100(c), 111(1), 123(3)

Keyword: "Opposition grounds - extension of subject-matter (no)"
"Decision re appeals - remittal (yes)"
"Amendments - opposition proceedings"

Decisions cited: T 0371/88, T 0689/90, T 0108/91, T 0040/97

Catchword: 

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DECISION
of the Technical Board of Appeal 3.2.1
of 27 May 2004

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Decision under appeal: Decision of the Opposition Division of the European Patent Office posted 21 May 2002 revoking European patent No. 0661488 pursuant to Article 102(1) EPC.

Composition of the Board:
Chairman: S. Crane
Members: J. Osborne
G. E. Weiss
Summary of Facts and Submissions

I. The appeal is directed against the decision posted 21 May 2002 to revoke European patent no. 0 661 488.

II. The patent had been opposed on the grounds that the subject-matter of the patent extended beyond the content of the application as filed (Article 100(c) EPC), that the patent did not disclose the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art (Article 100(b) EPC) and that the subject-matter of the patent was not patentable because it did not involve an inventive step (Article 100(a) EPC).

III. The Opposition Division found that the claims according to both a main and auxiliary request contained subject-matter which resulted from amendments contrary to the provisions of Article 123(2) and (3) EPC. In particular, it found that claim 1, which was directed towards a first embodiment of the invention, contained features which had been originally disclosed only in respect of a second embodiment. Moreover, it found that the introduction during opposition of a second independent claim, claim 3, directed towards a second embodiment which as granted had been the subject only of a dependent claim, extended the protection conferred by the patent.

IV. The Board summoned the parties to oral proceedings. With a letter dated 30 April 2004 the appellant announced that it would not be present at the oral proceedings. The appellant requested that the patent be maintained on the basis of claims 1 to 4 filed with a
letter dated 20 September 2002 (main request) or in the alternative on the basis of only the claims 1 and 2 (first auxiliary request) or only the claims 3 and 4 (second auxiliary request).

V. In oral proceedings held 27 May 2004 the respondent requested that the appeal be dismissed.

VI. The appellant's submissions can be summarised as follows:

As regards claim 1, the application as originally filed contains numerous references to operation of the travel block in both embodiments. Although the more detailed description of operation of the travel block is in the context of the second embodiment that disclosure is equally applicable to the first embodiment. There is nothing in the description to lead the skilled person to understand either that the travel blocks in the two embodiments are not similar or that they operate differently. Moreover, the reference to a corresponding application in respect of the travel block and pedestal configuration of the first embodiment makes it clear that the travel block operates in the same way as in the second embodiment. As set out in decision T 40/97 (not published in OJ EPO), in a case where a number of generally similar embodiments are discussed in equivalent terms the person skilled in the art would, in normal circumstances and when nothing pointed to the contrary, notionally associate the characteristics of one embodiment described in detail with the comparable element of another embodiment described in lesser detail.
As regards claim 3, the intention of the introduction of an independent claim is to replace the incorrect technical statement resulting from combining granted claims 1 and 3, namely the position of the pedestal at the lower end of the support tower, with an accurate technical statement which follows the terminology of claim 4 as originally filed and is in agreement with the totality of the description. The general intention of decision T 108/91 (OJ EPO 1994, 228) is that Article 123(2) EPC is not contravened when, as here, an incorrect technical statement evidently inconsistent with the totality of the disclosure is replaced by an accurate statement of the features involved. The finding of T 371/88 (OJ EPO 1992, 157) also is applicable to the present case. The skilled person would not understand a "stinger" to be capable of accepting the pedestal at its lower end and would therefore find the apparent implication of granted claim 3 problematic, whereupon recourse to the description would be necessary.

VII. The respondent essentially countered as follows:

As regards claim 1, the Guidelines and decision T 689/90 (OJ EPO 1993, 616) set out stringent conditions for introducing features from a document referenced in the description of the application as filed. None of those conditions is satisfied in the present case and the feature that the travel block has an open position is found in the application as originally filed only in respect of the second embodiment. Moreover, the features introduced into claim 1 constitute an intermediate generalisation of the disclosure in the referenced document.
As regards claim 3 the Opposition Division was correct in its finding that the newly presented independent claim extended the scope of protection afforded by the patent.

VIII. The subject-matter of claim 1 of the appellant's main request is essentially unchanged from that as granted whereas claim 3 has been reformulated as an independent claim with amended content.

Claims 1 and 3 of the appellant's main request read as follows:

"1. Apparatus on a vessel suitable for near vertical laying of a pipeline (20) offshore, the apparatus comprising:
a support base (12) mounted on the vessel (22);
a framework (14) mounted on said support base (12) and extending upwardly therefrom;
a pipe joint alignment tower (16) pivotally attached to and supported by said support base (12) and said framework (14);
a support tower (18) pivotally attached to said support base (12) and extending downwardly from said support base (12);
a pedestal (28) at the lower end of said support tower (18), said pedestal (28) being operable to releasably receive and support the weight of the pipeline (20); and
a travel block (26) received in said support tower (18) so as to be movable along the length of said support tower (18) to releasably receive and support the weight of the pipeline (20); wherein
a plurality of buckle arrestors (30) are provided at selected intervals on the pipeline (20); said pedestal (28) is operable to releasably receive and support the pipeline (20) by one of said buckle arrestors (30); and said travel block (26) is movable along the pipeline (20) and is operable between a first open position and a second closed position to releasably receive and support the weight of the pipeline (20) by one of said buckle arrestors (30) when said travel block (26) is in the second closed position, in cooperation with said pedestal (28).

"3. Apparatus on a vessel suitable for near vertical laying of a pipeline (20) offshore, the apparatus comprising:
a support base (12) mounted on the vessel (22);
a framework (14) mounted on said support base (12) and extending upwardly therefrom;
a pipe joint alignment tower (16) pivotally attached to and supported by said support base (12) and said framework (14);
a stinger support frame (42) pivotally attached to said support base (12) and extending downwardly from said support base (12);
a pedestal (46) at the lower end of said stinger support frame (42), said pedestal (46) being operable to releasably receive and support the weight of the pipeline (20); and
a stinger (44) attached to the lower end of said stinger support frame (42) and extending downwardly therefrom; and
a travel block (26) received in said stinger (44) so as to be movable along the length of said stinger (44) to
releasably receive and support the weight of the pipeline (20); wherein
a plurality of buckle arrestors (30) are provided at selected intervals on the pipeline (20);
said pedestal (46) is operable to releasably receive and support the pipeline (20) by one of said buckle arrestors (30); and
said travel block (26) is movable along the pipeline (20) and is operable between a first open position and a second closed position to releasably receive and support the weight of the pipeline (20) by one of said buckle arrestors (30) when said travel block (26) is in the second closed position, in cooperation with said pedestal (46)."

Claim 3 as granted reads:

"3. Apparatus according to claim 1, wherein said support tower (18) comprises a stinger support frame (42) pivotally attached to said support base (12) and a stinger (44) attached to the lower end of said stinger support frame (42) and extending downwardly therefrom; said travel block (26) being received in said stinger (44) so as to be movable along the length of said stinger (44)."

**Reasons for the Decision**

1. The application from which the granted patent derives was originally filed with two independent claims, one covering a first embodiment shown in Figures 1 to 4 of the drawings and the other covering a second embodiment shown in Figures 5 to 7. The patent as granted
contained a single independent claim 1 intended to cover both embodiments and a dependent claim 3 intended to set out in more detail features of the second embodiment. In the claims according to the appellant's present requests independent claims relate individually to the two embodiments.

2. The patent concerns apparatus for laying an offshore pipeline in a so called J-lay process. In this process the upper end of the pipeline is held on the lay vessel in a near vertical position whilst pipe sections are attached by welding. The pipeline extends downwardly into the water from its near vertical position on the lay vessel and curves round to lie on the sea bed. During the welding operations the weight of the upper end of the pipeline is supported by a pedestal in co-operation with a buckle arrestor provided on the pipeline. When a section of the pipeline is to be lowered into the sea a travel block located at the upper end of its travel takes the weight of the pipeline which is then released from the pedestal. As the lay vessel moves along the travel block moves downwards to feed the pipeline into the sea. When the travel block reaches the lowest extent of its travel the pedestal again supports the weight of the pipeline, the travel block releases and moves upwards to repeat the cycle. In a first embodiment the pedestal is located submerged at the lower end of a support tower which extends down from the lay vessel. The travel block moves between the pedestal and the upper end of the support tower. In a second embodiment the support tower is replaced by a stinger having the pedestal at its upper end above the water line and the travel block
moves between the pedestal and the lower end of the stinger.

Main request

3. **Claim 1 - Article 100(c) EPC**

3.1 In the application as originally filed claim 1, which relates to the first described embodiment, defines "means ... for receiving and supporting the weight of the pipeline" whilst in dependent claim 3 the means are further defined as "a travel block ... and a pedestal ... for receiving and supporting the weight of the pipeline from said travel block". In the description the only additional information as regards the operation of the arrangement of the first embodiment is that "after addition of the new joint, the travel block is raised to pick up the pipeline load, the pedestal is opened, and then the travel block is lowered ... and the weight of the pipeline is transferred to pedestal 26" (column 4, lines 41 to 47 of the published application). As regards the details of the arrangement itself the following information is given: "although any suitable equipment may be used to achieve the operations required of the travel block and pedestal, the travel block and pedestal configuration described in European Patent Application No. 94305071.6 is preferred for the most efficient and time saving weight transfer" (column 4, lines 50 to 56).

3.2 Claims 4 and 5 as originally filed, which relate to the second described embodiment, disclose that the travel block is "operable to releasably receive and support the weight of the pipeline in cooperation with the
pedestal". The description states: "pedestal 46 operates in a similar fashion as above so as to cooperate with travel block 26 for receiving and transferring the weight of the pipeline between the pedestal and travel block. Pedestal 46 is provided with clamp 48 that moves between an open position where it does not support the weight of the pipeline and a closed position where it does support the weight of the pipeline" (column 6, lines 18 to 23) and "clamp 48 is then closed to receive a buckle arrestor on the pipeline and support the weight of the pipeline while another joint is added and travel block 26 is opened to release the pipeline and raised back up to the pedestal" (column 6, lines 27 to 31).

3.3 The essential difference between the content of present claim 1 and the explicit original disclosure of the application as filed in respect of the first embodiment is that the travel block is defined as being operable between a first, open position and a second, closed position. This permits the travel block when open to move past a buckle arrestor on the pipeline and subsequent closure enables it to engage the buckle arrestor from below in order to support the weight of the pipeline. As set out above this information was originally disclosed only in respect of the second embodiment. However, the description of the first embodiment includes the statement that the travel block and pedestal configuration described in the cross-referenced European application No. 94305071.6 (published as EP-A-0 657 670, hereafter RD) is preferred. RD discloses in column 5, lines 44 to 47 that "the two sections of travel block 16 are movable
between a first closed position and a second open position”.

3.4 The Boards have set out conditions under which features which are not disclosed in the description of an invention as originally filed but only in a cross-referenced document can be introduced by way of amendment into the claims of an application (see decision T689/90, reasons 2.2). These conditions are that the description of the invention as filed leaves no doubt to a skilled reader:

(a) that protection is or may be sought for features which are only disclosed in the reference document;

(b) that the features which are only disclosed in the reference document contribute to achieving the technical aim of the invention and are thus comprised in the solution of the technical problem underlying the invention which is the subject of the application;

(c) that the features which are only disclosed in the reference document implicitly clearly belong to the description of the invention contained in the application (Article 78(1)(b) EPC) and thus to the content of the application as filed (Article 123(2) EPC); and

(d) that such features are precisely defined and identifiable within the total technical information within the reference document.

3.4.1 In the present case the application as originally filed contained the features of the travel block and pedestal
in both claims 3 and 4. It follows that it was clear that protection was sought for these features and details thereof. The additional feature of the travel block being movable between a first, open position and a second, closed position disclosed in RD was the only additional feature specified in claim 2 of RD and so was disclosed separately from the general description of the embodiments. Condition (a) therefore is satisfied.

3.4.2 The problem to be solved as set out in the application as originally filed was to transfer the weight of the upper end of the pipeline to a holding mechanism so that the lowering mechanism can be raised in preparation for receiving the weight of the pipeline after addition of the next joint whilst maintaining a low centre of gravity with respect to the vessel (column 2, lines 25 to 31 and 39 to 46). The features of the travel block and pedestal perform the weight transfer and so contribute to the solution of this problem, as required by condition (b).

3.4.3 Condition (c) is met by the statement in the application as originally filed that "although any suitable equipment may be used to achieve the operations required of the travel block and pedestal, the travel block and pedestal configuration described in ... [RD] ... is preferred for the most efficient and time saving weight transfer".

3.4.4 In RD the features of the travel block and pedestal are contained in claim 1 and the additional feature that the travel block is movable between a first, open and a second, closed position is in claim 2. Furthermore, the
operation of the travel block and pedestal is clearly explained in the description between column 5, line 38 and column 6, line 34 and column 7, line 56 to column 8, line 24, thereby fulfilling condition (d).

3.5 It follows from the foregoing that all of the four conditions set out in decision T689/90 are satisfied in the present case. Moreover, the arrangement disclosed in the application as originally filed in respect of the second embodiment also comprises a travel block movable between a first, open position and a second, closed position, see column 6, lines 29 to 31. It is stated that the main difference between the embodiments concerns the replacement of a support tower by a stinger and the associated re-positioning of the travel block and pedestal. The travel blocks in the two embodiments not only carry the same reference numeral but also are illustrated in a similar way and in both cases function together with a series of buckle arrestors mounted on the pipeline. There is no indication of any differences in the operation of the travel block in the two embodiments and in the Board's opinion, notwithstanding the unusual layout of the description in which the operation of the travel block and pedestal is fully explained only in respect of the second embodiment, the finding of decision T40/97 (see VI above) is applicable to the present case. The skilled person would therefore understand that the travel block in the first embodiment would operate between a first, open and a second, closed position.

3.6 The Board therefore concludes that the amendment of claim 1 to include the feature that the travel block is operable between a first, open and a second, closed
position does not result in an extension of the subject-matter of the patent beyond the content of the application as filed.

4. **Claim 3 - Article 123(3) EPC**

4.1 In the patent as granted claim 1 states that the support tower extends downwardly from the vessel and carries the pedestal at its lower end. Claim 3 states that the support tower "comprises" a stinger which extends downwardly from the vessel but fails to further define the pedestal. Claim 3 as granted therefore defines an apparatus having a downwardly extending stinger with a pedestal at its lower end. According to present claim 3, however, a stinger support frame has at its lower end both a pedestal and a downwardly extending stinger. The pedestal therefore is not at the lower end of the stinger, as is the case according to claim 3 as granted, but at the upper end. It follows that claim 3 according to the present request defines subject-matter which is not covered by the subject-matter of claim 3 as granted. It is therefore necessary to consider whether claim 3 as granted nevertheless afforded protection for the subject-matter of present claim 3.

4.1.1 Claim 3 as granted was consistent with claim 1 as regards terminology with claim 3 merely requiring that the support tower comprise a stinger support frame and a stinger arranged in a particular way. It is apparent in the circumstances that the term "comprise" is intended to take that one of its conventional meanings which is "being" or "being in the form of", cf. column 3, lines 27 and 28 of the patent specification
"the support tower, which can be in the form of a stinger ...".

A stinger is a known device which provides support to a pipeline as it passes from the lay vessel down to the sea bed (see, for example, RD reference sign "22"). It is known from RD that the stinger may comprise clamps at its upper end which enable the stinger to support the pipeline during welding of additional pipe sections (RD column 5, lines 32 to 36) and in the Board's view the term "stinger" does not necessarily imply that the structure would be incapable of carrying the pedestal for supporting the weight of the pipeline at its lower end, thereby also serving the purpose of a support tower. The appellant has provided no evidence to support its assertion that the term "stinger" would be understood by the skilled person in the context of claim 3 as meaning that the pedestal could not be located at its lower end i.e. at the lower end of the "support tower" as required by granted claim 1. Consequently there is no inconsistency within the claims as granted.

4.1.2 Decision T371/88, cited by the appellant in support of its case, found that the replacement of one term in a granted claim by another, less restrictive term would be permissible under Article 123(3) EPC provided two conditions were fulfilled. One condition is that the term in the granted claim is not so clear in is technical meaning in the given context that it could be used to determine the extent of protection without interpretation by reference to the description and drawings of the patent. As explained in the preceding
paragraph, this condition is not fulfilled in the present case.

4.1.3 The second embodiment in the description differs from the first both in the provision of the pedestal above the water level and in the replacement of the support tower by a stinger, providing additional support for the pipeline. The stinger has a lower weight than the support tower, implicitly because it need not withstand forces resulting from the pedestal being at the lower end. However, it is not stated in the description that the provision of a stinger necessitates the repositioning of the pedestal. It follows that the inclusion in claim 3 as granted of only one of the features which differentiate the two embodiments, the stinger, does not lead to a clear inconsistency with the description so that even when interpreting the claims in the light of the description the skilled person would not understand that another definition of the subject-matter had been intended. The situation thus differs from that considered in decision T108/91 in which it was concluded that the intended meaning of the claim when read in the light of the description was clearly not as defined by the wording.

4.1.4 It follows from the foregoing that present claim 3 does offend against the provision of Article 123(3) EPC. The main request therefore must be refused.

First auxiliary request

5. The claims according to this request contain only claims 1 and 2 of the main request. The contravention of the provision of Article 123(3) EPC which resulted
in the refusal of the main request therefore does not occur.

Further procedure

6. The opposition was based not only on the ground of Article 100(c) EPC considered above but also on the grounds of Article 100(b) EPC and Article 100(a) EPC which were not treated in the impugned decision. Under these circumstances the Board exercises its discretion under Article 111(1) EPC and remits the case to the first instance for further prosecution.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the first instance for further prosecution.

The Registrar:    The Chairman:

A. Vottner     S. Crane

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