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Datasheet for the decision of 9 June 2017

Case Number: T 0046/15 - 3.2.04

Application Number: 06007844.1

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Language of the proceedings: EN

Title of invention:
Compressor starting torque converter

Applicant:
ConocoPhillips Company

Headword:

Relevant legal provisions:
EPC Art. 76(1), 123(2)

Keyword:
Amendments - allowable (no)
Divisional application - subject-matter extends beyond content of earlier application (yes)

Decisions cited:
G 0002/10, T 2311/10, T 1852/13

Catchword:

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Beschwerdekammern
Boards of Appeal
Chambres de recours

European Patent Office
D-80298 MUNICH
GERMANY
Tel. +49 (0) 89 2399-0
Fax +49 (0) 89 2399-4465

Case Number: T 0046/15 - 3.2.04

D E C I S I O N
of Technical Board of Appeal 3.2.04
of 9 June 2017

Appellant: (Applicant)	ConocoPhillips Company 216 Patent Library Building, Bartlesville Technology Center Bartlesville, OK 74004 (US)
Representative:	Wunsch, Alexander Bardehle Pagenberg Partnerschaft mbB Patentanwälte, Rechtsanwälte Prinzregentenplatz 7 81675 München (DE)
Decision under appeal:	**Decision of the Examining Division of the European Patent Office posted on 27 June 2014 refusing European patent application No. 06007844.1 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman	S. Oechsner de Coninck
Members:	E. Frank
	C. Schmidt

Summary of Facts and Submissions

I. The appellant (applicant) lodged an appeal, received on 8 September 2014 against the decision of the examining division, dispatched 27 June 2014 refusing the application N° 06 007 844.1, a divisional application of earlier European patent application N° 01 962 349. He paid the appeal fee the same day and submitted the statement setting out the grounds of appeal on 6 November 2014.

The examining division held that the application did not meet the requirements of Article 76(1) EPC because it contained amendments extending beyond the content of the earlier application as filed.

II. In a communication following the summons to oral proceedings, the Board gave its provisional opinion regarding the requirements of Article 76 EPC.

III. Oral proceedings took place on 9 June 2017. As announced in his letter of 3 May 2017 the appellant did not attend the oral proceedings.

IV. The appellant requests that the decision under appeal be set aside and that a patent be granted on the basis of the main request filed on 3 January 2012 or, alternatively, on the basis of an auxiliary request filed with letter dated 6 November 2014.

V. The wording of the independent claim 1 according to the requests on file at the time of the present decision and relevant thereto reads as follows:

- Main request

"A power transmission system (10) for driving at least one compressor (18) of a liquefied natural gas (LNG) plant comprising:
a) a driver (12) comprising a shaft, where one end of the shaft is the driver output shaft (14);
b) a device (20) having a pump impeller (24) on an input shaft (22) coaxially connected to the driver output shaft (14) and a turbine wheel (28) on an output shaft (26) positioned coaxially with the pump impeller (24), and where the device (20) further comprises a lock-up device (40) between the pump impeller (24) and the turbine wheel (28) to lock the impeller (24) and the turbine wheel (28) together; and
c) at least one compressor (18) which is used to compress natural gas and having an input shaft coaxially connected to the device (20) output shaft (26)".

- Auxiliary request
"A power transmission system (10) for driving at least one compressor (18) of a liquefied natural gas (LNG) plant comprising:
a) a driver (12) comprising a shaft, where one end of the shaft is the driver output shaft (14);
b) a device (20) comprising a fluid coupling having a pump impeller (24) on an input shaft (22) coaxially connected to the driver output shaft (14) and a turbine wheel (28) on an output shaft (26) positioned coaxially with the pump impeller (24), and where the device (20) further comprises a lock-up device (40) between the pump impeller (24) and the turbine wheel (28) to lock the impeller (24) and the turbine wheel (28) together; and where the fluid coupling can be drained and filled with operating fluid (30); and
c) at least one compressor (18) of a liquefied natural gas (LNG) plant, which is used to compress natural gas

and having an input shaft coaxially connected to and driven by the device (20) output shaft (26)."

VI. The appellant argues as follows:
The "compressor starting torque converter (CSTC)" is not an essential feature of the parent application and would pass the three-point test or essentiality test as identified in T0331/87 in case of amendments concerning the removal or replacement of a feature. The non-essential character is derivable from the passage on page 5, lines 22-25 that explains the fundamental principle of the invention to be a device that allows the compressor to be isolated from the gas turbine driver.
The auxiliary request is allowable because it further emphasises the fundamental principle of the invention that the compressor starting device acts as a fluid coupling.

Reasons for the Decision

1. The appeal is admissible.

2. Main request - Added-matter, Articles 76(1) and 123(2) EPC

2.1 In the present case the application is a divisional application of an earlier application EP01962349 filed on 07 August 2001 and published under the international publication number WO 02/12692. During examination of the present divisional application, claim 1 according to the main request filed on 3 January 2012 has in particular been amended by replacing in its feature b) the term "compressor starting torque converter (CSTC)" by the term "device".

2.2 According to established case law, the requirements laid down in Art. 123(2) EPC are understood to mean that an amendment may only be made within the limits of what a skilled person would derive directly and unambiguously, using common general knowledge, and seen objectively and relative to the date of filing, from the whole content of the description, claims and drawings (see see Case Law of the Boards of Appeal of the European Patent Office, 8th edition 2016 (CLBA), II.E.1.2.1, with further reference to the "gold standard" cited in decision G 2/10). Since the wording of the two articles is nearly identical, for determining compliance of a divisional application with Article 76(1) EPC, second sentence, the same standard is to be applied (see CLBA, 8th edition 2016, II.F. 1.2.1).

2.3 For a positive assessment of the allowability of an amendment to a divisional application both requirements of Article 123(2) and 76(1) should be met. However, the examining division held that the amendment did not meet the requirements of Article 76(1) EPC because the replacement of the original "compressor starting torque converter (CSTC)" by a more general "device" extended beyond the content of the earlier application as filed. The Board will therefore examine the negative findings of the examining division with respect to Article 76(1) EPC.

2.4 The appellant does not contest that the term compressor starting torque converter or CSTC was present throughout the original disclosure of the parent application as published. In particular the CSTC was originally foreseen and consistently referred to in relation to the detailed disclosure of its structure in figures 1 and 3, where its representation is enlarged,

thereby constituting an original disclosure of central importance for the skilled person.

2.5 Starting from page 4 line 11, the skilled person learns that the CSTC is a mechanical device having a fluid coupling between an impeller 24 and turbine wheel 28, whereby its torque conversion ability results in the use of guide vanes 32 in the fluid path to vary the torque amplification (page 4, lines 25-26). A unique feature of the CSTC is to drain and refill its "unit", as is emphasised on page 5, lines 3-9, and how this feature is used in the transmission for the starting sequence is explained in the following paragraph. From this contextual reading of the description the skilled person infers that the CSTC is a specific piece of equipment of the fluid coupling type, with variable torque conversion and draining/refilling ability. Therefore, contrary to the appellant's submission, the skilled person cannot derive a direct and unambiguous disclosure that any fluid coupling device having a torque conversion or any other device may be used in the power transmission system to start the compressor.

2.6 The appellant submits that the CSTC would not be an essential feature of the parent application because the literal disclosure on page 5, lines 22 to 25 more generally disclosed the fundamental principle of isolating a driver from the compressor.

2.7 The particular passage referred to by the appellant should be read contextually, and is directly preceded by two paragraphs explaining the unique feature of the CSTC to be able to be drained and refilled and the basic operating principle behind this CSTC and summarizes the operating sequence during start up: first start the gas turbine in a conventional way with

decoupled compressor before starting it with the gas turbine operating at enough speed. The sentence referred to by the appellant starts with the expression "in other words", i.e. expressing a reformulation or a summary of the previous explanations, and continues with the expression "the fundamental principle is a device 20". The second sentence refers again to the CSTC. Therefore, when read in context, the skilled person would not consider the "device 20" to relate to any other device, but instead to the very same CSTC used for the starting operation of the compressor.

2.8 The appellant furthermore submits that the replacement of the CSTC by the term "device" would pass the three-point test or essentiality test" as identified in T0331/87 in case of amendments concerning the removal or replacement of a feature: i) it would not be explained as essential in the disclosure because a simple fluid was disclosed coupling on page 5, lines 15-17, ii) the torque converter would not be technically required because it can be performed by a fluid coupling as isolating device, and iii) the replacement of a torque converter by a device acting as fluid coupling does not require modification of other features to compensate for the change.

2.8.1 The essentiality test has been elaborated in the decision T0331/87. The Board held that the replacement or removal of a feature from a claim might not be in breach of Art. 123(2) EPC 1973 if the skilled person would directly and unambiguously recognise that (1) the feature was not explained as essential in the disclosure, (2) it was not, as such, indispensable for the function of the invention in the light of the technical problem it served to solve, and (3) the

replacement or removal required no real modification of other features to compensate for the change.
As to the applicability of this test the Board first notes that the decision T0337/87 primarily concerned the removal of a feature. Since in the present case a specific device "CSTC" has been generalised by defining a more generic "device", the present Board is not convinced that the test's use is appropriate in the present case.
More particularly, having regard to the assessment of the generalisation at hand, the Board refers to, e.g., T 2311/10, where the essentiality test has been found not applicable in the case of (intermediate) generalisations.
In the more recent decision T 1852/13 the Board even stated that the essentiality test as such could not replace the application of the gold standard, and that if in some cases it could give a useful indication, the gold standard was still the only relevant test (see point 2.2.7.a)).
Both decisions have therefore concluded that the "essentiality test" could not replace the need to answer the question of what a skilled person would objectively have derived from the description, claims and drawings of a European patent application on the date of filing known as the "gold standard". The present Board concurs with these decisions, and as exposed here above already came to the conclusion that the amendment does not pass the gold standard.

2.8.2 Even if the essentiality test was used as an examining aid to determine the allowability of the present amendment, the Board would not reach the same result as the appellant.
The passages quoted by the appellant concerning the basic operating principle on page 5, lines 15-17, and

the general definition of the fluid coupling and torque converter on page 4, lines 22-26, have been isolated from the overall context of the disclosure. As explained above, this disclosure defines the CSTC as a specific device, comprising a fluid coupling (21) with a torque converter (32), having a draining/refilling capability (page 5, lines 3-9) and with a locking means (40). These passages do not give a direct and unambiguous disclosure that another coupling having only one or some of the above properties could be used. Therefore the CSTC is presented as an essential part of the claimed transmission system. Also the assumption that the torque converter would not be required for starting the compressor but merely a fluid coupling cannot be followed because the starting sequence as explained in the same passage makes use of all the specific features of the CSTC including the torque converter part. Therefore the amendment to claim 1 would fail to meet criteria i) and ii) of the essentiality test.

2.9 From the above the Board concludes that the examining division was correct in deciding that the replacement of the compressor starting torque converter (CSTC) by a more general "device" in claim 1 added new subject-matter not originally disclosed in the parent application as filed (Art 76(1) EPC).

3. Auxiliary request - Added Matter, Article 76(1) and 123(2) EPC

3.1 The relevant amendment concerns the addition of the feature *comprising a fluid coupling* to further define the "device (20)". This addition merely defines that the device requires a fluid coupling. Hence, this amendment does not restore the compressor starting

torque converter as identified above as the sole directly and unambiguously defined device for use in the originally disclosed power transmission.

3.2 On the same ground that the parent application as filed did not contain any direct and unambiguous information on any alternative to the CSTC referred to throughout its whole content, the Board cannot follow the appellant's submission that claim 1 of the auxiliary request would be allowable because it further specifies that the compressor starting device should act as a fluid coupling. As already set out above, the application as filed does not disclose the fluid coupling features of the CSTC as a stand alone solution without any of its other features.

3.3 From the above the Board concludes that the subject-matter of the auxiliary request has also been amended such that it extends beyond the content of the parent application as published (Art 76(1) EPC).

Order

For these reasons it is decided that:

The appeal is dismissed

The Registrar: The Chairman:

G. Magouliotis S. Oechsner de Coninck

Decision electronically authenticated