Datasheet for the decision
of 7 July 2016

Case Number: T 2316/12 - 3.2.06
Application Number: 10153052.5
Publication Number: 2186720
IPC: B62M7/12, B60K7/00, B62M6/65
Language of the proceedings: EN

Title of invention:
A device for externally rotary drive of offset motor

Applicant:
Yang, Tai-Her

Headword:

Relevant legal provisions:
EPC Art. 123(2)

Keyword:
Amendments - added subject-matter (yes) Main request, Auxiliary requests 1 to 5 - undisclosed disclaimer Auxiliary request 4

Decisions cited:
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DE C I S I O N
of Technical Board of Appeal 3.2.06
of 7 July 2016

Appellant: Yang, Tai-Her
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Decision under appeal: Decision of the Examining Division of the
European Patent Office posted on 1 June 2012
refusing European patent application No.
10153052.5 pursuant to Article 97(2) EPC.

Composition of the Board:
Chairman: M. Harrison
Members: M. Hannam
W. Ungler
Summary of Facts and Submissions

I. An appeal was filed by the appellant (applicant) against the decision of the examining division refusing European patent application No. 10153052.5. It requested that the decision be set aside and a patent be granted according to a main request or in the alternative according to one of auxiliary requests 1 to 4.

II. The Board issued a summons to oral proceedings and a subsequent communication containing its provisional opinion, in which it indicated inter alia that the subject-matter of claim 1 of the main request and of each of the auxiliary requests 1 to 4 respectively appeared to extend beyond the content of the application as filed, contrary to the requirement of Article 123(2) EPC, and in regard to claim 1 of the main request that its subject-matter appeared not to be novel.

III. The following document is relevant for the present decision:

D5 US-A-3 908 776

IV. With letter of 6 June 2016, the appellant filed an auxiliary request 5.

V. With letter of 1 July 2016, the appellant withdrew its request for oral proceedings, also stating that it would not attend the scheduled proceedings. It furthermore requested that the Board reach its decision based on the written submissions.
VI.  Oral proceedings were held in the absence of the appellant on 7 July 2016. According to the written submissions the appellant’s requests were to set aside the decision and grant a patent based on the main request, or according to one of auxiliary requests 1 to 4, all as filed with the notice of appeal, or to grant a patent on the basis of auxiliary request 5 as filed on 6 June 2016.

VII. Claim 1 of the main request reads as follows:
"A drive apparatus comprising an external rotary assembly having a hub (11) mounted on a central shaft (12), and a drive motor (3), the drive motor being housed within an offset device (2) fixed within the hub, and a transmission means (4) driven by the drive motor (3), wherein the transmission means is positioned within the hub, and is constituted by a primary gear (41) fixed to the output shaft of the motor, and wherein a ring gear is fixed to the hub, the ring gear and the primary gear being interengageable, wherein the motor output shaft is on a different axis to, and substantially parallel to, the central shaft; characterised in that:
the primary gear is a first gear (41) fixed to the output shaft of the motor, and the ring gear is constituted by a second gear (42) fixed to the hub, wherein the drive motor is in drivable engagement with teeth of the second gear via a motor output shaft (31) and wherein the first and second gears engage respectively by teeth on their exterior and interior surfaces."

Claim 1 of auxiliary request 1 reads:
"A drive apparatus comprising an external rotary assembly having a hub (11) mounted on a central shaft (12), and two or more than two drive motors (3, 3’),
each drive motor being housed within a respective offset device (2, 2') fixed within the hub, and a transmission means (4, 4'), wherein the transmission means is positioned within the hub, and is constituted by a respective primary gear (41, 41') fixed to the output shaft of each motor, and wherein a ring gear is fixed to the hub, the ring gear and each primary gear being interengageable, wherein the motor output shaft is on a different axis to, and substantially parallel to, the central shaft; characterised in that:
each primary gear is a respective first gear (41, 41') fixed to the output shaft of the respective motor, and the ring gear is constituted by a second gear (42, 42') fixed to the hub, wherein each drive motor is in drivable engagement with teeth of the second gear via a motor output shaft (31, 31', 31'') and wherein the first and second gears engage respectively by teeth on their exterior and interior surfaces."

Claim 1 of auxiliary request 2 reads as for claim 1 of auxiliary request 1, with the following feature appended:
"and wherein the hub (11) is constituted by two shell halves (111)."

Claim 1 of auxiliary request 3 reads as for claim 1 of the main request with the first appearance of the word 'fixed' being deleted, and the following feature being appended:
"wherein the offset device (2) and the drive motor (3) are in a fixed eccentric position relative to the hub (11) with the primary gear (41) engaged with the ring gear."

Claim 1 of auxiliary request 4 reads as for claim 1 of the main request, with the following feature appended:
"wherein the drive motor is not configured to have a right-angled transmission."

Claim 1 of auxiliary request 5 reads as for claim 1 of the main request with the following feature inserted immediately after the words 'characterised in that': "the drive motor (3) includes a rotor which extends externally of the motor, the exposed part of the rotor forming the output shaft of the motor".

VIII. The appellant's arguments relevant to the present decision may be summarised as follows:

The subject-matter of claim 1 of auxiliary request 1 did not extend beyond the content of the application as filed. Page 8, line 4 onwards which referred to the Fig. 10 embodiment, disclosed there being more than two drive motors, as did page 16, lines 24 to 25. The application furthermore mentioned one or more drive motors in several locations, particularly on page 5, lines 15 to 17, thus providing a basis for the claimed more than two drive motors. These arguments applied equally to auxiliary request 2.

The subject-matter of claim 1 of auxiliary request 3 met the requirement of Article 123(2) EPC. The claimed fixed eccentric position was disclosed on page 5, line 31 to page 6, line 1 and on page 14, lines 11 to 15. Whilst perhaps no literal textual basis existed, when read in conjunction with the drawings there was still a direct and unambiguous basis for the feature added to claim 1.

The disclaimer included in claim 1 of auxiliary request 4 overcame the accidental anticipation of the subject-matter of the previous requests by D5. The disclaimer
was justified under the principles laid down in G2/10.

The subject-matter of claim 1 of auxiliary request 5 did not extend beyond the content of the application as filed. The feature added to claim 1 was disclosed on page 4, lines 19 to 24.

Reasons for the Decision

1. **Main request**

1.1 Article 123(2) EPC

The subject-matter of claim 1 fails to meet the requirement of Article 123(2) EPC.

1.2 With respect to claim 1 as filed, claim 1 of the main request has been amended *inter alia* to include the further feature 'the output shaft is on a different axis to the central shaft'. This feature is not disclosed literally anywhere in the application as filed, the axis of the output shaft indeed not being mentioned at all therein.

1.3 In its letter of 6 June 2016, the appellant asserts that the application is translated from Chinese which expresses meaning on a more contextual basis than English, with the corollary that the description must be read in conjunction with the drawings in order to interpret the context in which the features are disclosed. Whilst the Board accepts that the description should be read in conjunction with the drawings, such that reliance is not only placed on the strict literal wording of the description, the proviso
still remains that the requirement of Article 123(2) EPC is however only met by claim 1 if the subject-matter of the claim is, explicitly or implicitly, directly and unambiguously disclosed to the skilled person using common general knowledge in the application as filed.

1.4 Claim 1 as originally filed comprises the feature 'the motor output shaft is substantially parallel to the central shaft'. It thus follows that the feature added to claim 1 'the output shaft is on a different axis to the central shaft' must be understood contextually to add further detail and thus mean something different to the 'substantially parallel' condition of the two shafts. In order to interpret this necessary difference between the two expressions, it can be understood that the 'substantially parallel' feature must include almost co-axial arrangements of the central and motor output shafts; if this were not the case, the feature 'on a different axis to' would, in the present context, add no further detail to the already present 'substantially parallel to'. From this, it is apparent that the feature 'on a different axis to' cannot simply be considered to be disclosed in the application as filed by virtue of the 'substantially parallel' arrangement of the motor output shaft and the central shaft.

1.5 As regards the figures possibly being relied upon as the basis for the claimed subject-matter, it is evident that these each depict a significantly greater number of features in combination with that which has been taken up into claim 1. The assertion that the figures thus provide a basis for the feature 'the output shaft is on a different axis to the central shaft' to be taken up into claim 1 in isolation from those features
with which it is disclosed in combination in the figures, is not accepted.

1.6 Despite the Board in its communication pursuant to Article 15(1) of the Rules of Procedure of the Boards of Appeal expressing its doubts that the above feature, was directly and unambiguously disclosed to the skilled person in the application as filed, the appellant chose not to provide any counter arguments in writing and did not attend the oral proceedings to provide any argument. The Board thus sees no reason to change its preliminary opinion and confirms that the subject-matter of claim 1 fails to meet the requirement of Article 123(2) EPC.

1.7 The main request is thus not allowable.

1.8 It may be noted that the Board's detailed objection to the subject-matter of claim 1 lacking novelty also went unanswered in the appellant's letter of 6 June 2016. This is however not addressed further here, since the request is not allowable already under Article 123(2) EPC.

2. It is furthermore noted that the above feature that 'the output shaft is on a different axis to the central shaft' is present in the subject-matter of claim 1 of each of the auxiliary requests 1 to 5. Thus on this basis alone these auxiliary requests are not allowable, since no features of these requests can be seen as altering the finding reached for the main request. However, in addition, the further amendments in the respective claim 1 of each of the auxiliary requests 1 to 5 are also found not to meet the requirement of Article 123(2) EPC, as detailed herebelow.
3. **Auxiliary request 1**

3.1 **Article 123(2) EPC**

The subject-matter of claim 1 fails to meet the requirement of Article 123(2) EPC.

3.2 Relative to the main request, the subject-matter of claim 1 of this request has been amended to include *inter alia* that the drive apparatus comprises two or more than two drive motors. An apparatus comprising two or more drive motors is disclosed just twice in the application as filed:

On page 8, line 4 onwards of the application as filed, referring to the Fig. 10 embodiment, which embodiment however is directed to a friction wheel drive rather than the toothed gears of claim 1; and

On page 16, lines 24 to 25 which also relates solely to a friction wheel drive embodiment.

It is noted that friction wheel arrangements are technically fundamentally different to the claimed toothed gear apparatus. It is thus apparent that a direct and unambiguous disclosure of the claimed two or more than two drive motors in combination with toothed first and second gears is not originally disclosed, such that the subject-matter of claim 1 extends beyond the content of the application as filed (Article 123(2) EPC).

3.3 As regards the appellant's argument that 'one or more' drive motor is repeatedly mentioned in the description also in the toothed gear embodiments, particularly on page 5, lines 15 to 17, and that this provides a direct and unambiguous disclosure of the claimed two or more than two drive motors, this is not persuasive. Whilst it can be accepted that the disclosed 'one or more
drive motor' encompasses the claimed 'two or more than two drive motors', and examples of three and four motors are given, the referenced passage of the description is part of a more extensive disclosure relating to the apparatus of Figs. 3 and 4 (see page 5, line 10 onwards) such that the one or more drive motor is only disclosed in combination with a number of further features of this embodiment; for example, coupling means 21 and fitting 22 attached to the external end of the offset means. It thus follows that the isolated selection of the feature relating to two or more than two drive motors for inclusion in claim 1 extends beyond the content of the application as filed.

3.4 The appellant's assertion that 'one or more drive motor' is repeatedly mentioned in the description also fails to provide the required basis. The appellant has failed to indicate a passage in the application as filed in which the 'one or more drive motor' (as the basis for the claimed 'two or more than two drive motors') is disclosed in combination with the further features included in claim 1. Due to the appellant's non-attendance at the scheduled oral proceedings, the Board has to rely on the information given in the appellant's letter dated 6 June 2016. It follows that a direct and unambiguous basis for the subject-matter of claim 1 including the 'two or more than two drive motors' is lacking in the application as filed.

3.5 The subject-matter of claim 1 thus fails to meet the requirement of Article 123(2) EPC.

3.6 Auxiliary request 1 is thus not allowable.

4. Auxiliary request 2
4.1 Article 123(2) EPC

The subject-matter of claim 1 of this request, similarly to that of auxiliary request 1, comprises the feature of 'two or more than two drive motors'. The appellant has provided no arguments beyond those presented for auxiliary request 1 in defence of this request. The Board also sees no amendment to claim 1 which would lead it to reach a different conclusion to that relating to auxiliary request 1.

4.2 The subject-matter of claim 1 of auxiliary request 2 thus fails to meet the requirement of Article 123(2) EPC. As a consequence, the request is not allowable.

5. Auxiliary request 3

5.1 Article 123(2) EPC

The subject-matter of claim 1 fails to meet the requirement of Article 123(2) EPC.

5.2 No direct and unambiguous disclosure is to be found in the application as filed of the feature added to claim 1 that the offset device and the drive motor are in a fixed eccentric position relative to the hub. As regards the basis for the amendment suggested by the appellant as being from page 5, line 31 to page 6, line 1 and on page 14, lines 11 to 15, both of these passages are written in such grammatically problematic English that a direct and unambiguous basis for the added feature cannot be found. In this respect the appellant argues that despite the lack of a literal textual basis a direct and unambiguous basis is nonetheless present in the figures. However, the figures each disclose a specific arrangement in which
the feature taken up into claim 1 is disclosed in combination with further features. The omission at least of these further features from claim 1 thus results in the requirement of Article 123(2) EPC not being met.

5.3 It thus follows that the subject-matter of claim 1 extends beyond the content of the application as filed, contrary to the requirement of Article 123(2) EPC. Auxiliary request 3 is thus not allowable.

6. Auxiliary request 4

6.1 Article 123(2) EPC

The subject-matter of claim 1 of this request also fails to meet the requirement of Article 123(2) EPC.

6.2 Claim 1 has been amended to include the feature 'wherein the drive motor is not configured to have a right-angled transmission'. The exclusion of a right-angled transmission is not disclosed anywhere in the application documents such that this feature is understood by the Board to be a so-called 'undisclosed disclaimer'.

6.3 G1/03 concerns undisclosed disclaimers. In the Headnote, point 2.1, it states that it may be allowable to restore novelty inter alia if, from a technical point of view, the accidental anticipation is so unrelated that the person skilled in the art would never have taken it into consideration when working on the invention. The appellant's arguments referred only to G2/10 and thus do not address this specific issue.
6.4 In the present case, D5 concerns a drive arrangement for the wheel of a wheelchair and thus evidently bears great similarity to the claimed invention. As such D5 therefore cannot be seen as an accidental anticipation of the claimed subject-matter. It follows that disclaiming the right-angled transmission thus does not meet the requirement for the disclaimer to be allowable, for which the disclosure of D5 would have to be unrelated and remote from the claimed invention.

6.5 This consideration was already presented in the Board's communication pursuant to Article 15(1) of the Rules of Procedure of the Boards of Appeal. The appellant however did not respond to this objection.

6.6 The Board thus sees no reason to revise its preliminary opinion, confirming herewith that the requirements for the undisclosed disclaimer to be allowable are not met. The subject-matter of claim 1 therefore fails to meet the requirement of Article 123(2) EPC. Auxiliary request 4 is thus not allowable.

7. Auxiliary request 5

7.1 Article 123(2) EPC

The subject-matter of claim 1 of this request also fails to meet the requirement of Article 123(2) EPC.

7.2 Based on claim 1 of the main request, the following feature has been added in the present claim 1: 'the drive motor includes a rotor which extends externally of the motor, the exposed part of the rotor forming the output shaft of the motor'. Irrespective of the potential lack of clarity in what is meant by 'the exposed part of the rotor', the basis for this
amendment allegedly comes from page 4, lines 19 to 24. It is noted that this portion of the description is once more written in such grammatically problematic English that a direct and unambiguous basis for the added feature cannot be identified. For example, the 'exposed part of the rotor forming the output shaft of the motor' has been inferred by the appellant as emanating from the disclosure in lines 19 to 24, lines 19 and 20 of which read 'the invention lies in the provision of a rotary transmission assembly external to a (sic) offset motor with exposed rotor parts ...'. The interpretation of the disclosed 'exposed rotor parts' as a singular item 'the output shaft of the motor' is without basis and cannot be directly and unambiguously derived using common general knowledge from the application as a whole.

7.3 It thus follows that the subject-matter of claim 1 extends beyond the content of the application as filed, contrary to the requirement of Article 123(2) EPC. Auxiliary request 5 is thus not allowable.
Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

M. H. A. Patin M. Harrison

Decision electronically authenticated