Case Number: T 1050/08 - 3.2.05
Application Number: 02080352.4
Publication Number: 1327807
IPC: F16K 7/06
Language of the proceedings: EN
Title of invention:
Flow control system and valve for controlling a fluid flow
Applicant:
Delphi Technologies, Inc.
Opponent:
-
Headword:
-
Relevant legal provisions:
EPC Art. 54, 123(2), 112(1)(a)
EPC R. 103
Relevant legal provisions (EPC 1973):
-
Keyword:
"Added subject-matter (main request & auxiliary request II, yes)"
"Novelty (auxiliary request I and III, no)"
"Reimbursement of appeal fee (no)"
"Referral to the Enlarged Board of Appeal (no)"
Decisions cited:
-
Catchword:
-
Case Number: T 1050/08 - 3.2.05

DECISION
of the Technical Board of Appeal 3.2.05
of 12 May 2009

Appellant: Delphi Technologies, Inc.
(Applicant)
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Representative: Denton, Michael John
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Decision under appeal: Decision of the Examining Division of the European Patent Office posted 21 January 2008 refusing European patent application No. 02080352.4 pursuant to Article 97(1) EPC.

Composition of the Board:
Chairman: P. Michel
Members: S. Bridge
M. J. Vogel
Summary of Facts and Submissions

I. The appellant (applicant) lodged an appeal against the decision of the examining division refusing European patent application No. 02 080 352.4.

II. The examining division held that the patent application according to the applicant's only request did not meet the requirements of Article 123(2) EPC.

III. The appellant requested in writing that the decision under appeal be set aside and a patent be granted in the following version:

- claims 1 to 9 (main request) received on 15 October 2007 or, as an auxiliary measure, on the basis of
- claims 1 to 9 filed as Appendix I,
- claims 1 to 7 filed as Appendix II or
- claims 1 to 7 filed as Appendix III, all received 3 April 2009.

Further he requested that the appeal fee be reimbursed and the question filed on 03 April 2009 be referred to the Enlarged Board.

IV. The appellant initially requested oral proceedings in case the Board should consider rejecting the appeal but withdrew this request on 03 April 2009 and at the same time announced that he would not be attending the oral proceedings.

V. Oral proceedings were held before the Board of Appeal on 12 May 2009 in the absence of the appellant.
VI. Independent claim 1 according to the main request reads as follows:

"A valve (10), for controlling a fluid flow (12) in a flexible conduit (14) having an outer surface (16) and a flow cross-sectional area (18), comprising:

a) a stationary member (20) having a convex surface portion adapted to support a first region (24) of the outer surface of the flexible conduit;

b) a first wheel (34) having a first central axis (38) and drivingly rotatable about the first central axis; and

c) a second wheel (36) having a second central axis (40), attached to and projecting beyond the first wheel, and freely rotatable about the second central axis, wherein the second central axis is spaced apart from the first central axis, wherein driving rotation of the first wheel moves the second wheel in a substantially circular arc (42) to compressingly contact a second region (26) of the outer surface of the flexible conduit, wherein the second region substantially opposes the first region enabling the second wheel to compress the flexible conduit to adjust the flow cross-sectional area of the flexible conduit".

VII. Claim 1 according to auxiliary request I differs from claim 1 according to the main request in that, in feature a), the wording "having a convex surface portion" is replaced by "having a cylindrical shape".

VIII. Claim 1 according to auxiliary request II differs from claim 1 according to the main request in that the
following text is added to the end of the claim: "in a range between a substantially full-flow state and a substantially zero-flow state".

IX. Independent claim 1 according to auxiliary request III contains, in combination, the amendments respectively introduced in auxiliary requests I and II.

X. The following document is referred to in the present decision:
D1 DE 955 750 C.

XI. In the written procedure, the appellant argued essentially as follows:

Alleged procedural violations

(a) In the summons to oral proceedings before the examining division, the first examiner had indicated that a form of claim wording would be acceptable and allowable. Therefore, the appellant believed that the only expected issue for discussion at the oral proceedings would be an acceptable form of claim wording. However, the appellant was informed by telephone on 7 January 2007, the day before the oral proceedings before the examining division, that there was a "new" objection on the basis of document D1. As the summons to oral proceedings had not mentioned document D1 any more, the appellant was taken by surprise and was not left with sufficient time to provide a considered response. It cannot be an acceptable situation for an examiner to legitimately raise new objections.
one day before oral proceedings and that this therefore constitutes a violation of the appellant's right to be heard.

(b) Furthermore, the nature of this novelty objection only became apparent in the written decision to refuse — so that the appellant was never given an opportunity to refute it.

(c) In respect of the objection under Article 123(2) EPC, the expression "cylindrical surface portion" was not mentioned prior to, or during, oral proceedings but appears in the contested decision.

The summary of the facts is therefore contested and the explanation given in the "Reasons for the Decision" is disputed, because these do not accurately reflect the discussions which took place at the oral proceedings.

Each of the above points (a) to (c) constitutes a procedural violation and, in consequence, the appeal fee should be reimbursed.

Question for the Enlarged Board of Appeal

The following question should be submitted to the Enlarged Board of Appeal regarding an applicant's right of redress in such circumstances — "Can an Applicant challenge any decision from the EPO when the written facts concerning oral proceedings are incorrect or disputed, and what rights does an Applicant have for making such a challenge?" which question was also rephrased as "Under what circumstances can an Applicant..."
challenge a decision from the EPO when the written report concerning oral proceedings are incorrect or disputed, and what rights does an Applicant have for making such a challenge?"

Added subject matter

The only portion of the stationary member 20 which forms part of, or is used in, the invention is the convex surface portion which engages the first region 24 of the outer surface of the flexible conduit 14. The remaining parts of the stationary member are irrelevant to the invention and have no bearing on the operation of the invention.

Furthermore, the dictionary definition of convex fits the arrangement shown in the drawings: the "convex surface portion" is shown in Figures 2 and 3 and so is disclosed in the application as filed.

Further still, the independent claims in a European patent application are required to include the essential features for putting an invention into effect. In respect of the stationary member, the only essential features that are required are that it is stationary, and that it has a surface portion which is capable of interacting with the second wheel to compress the flexible conduit. Claim 1 contains these features. Any further restriction of the definition of the stationary member in claim 1 unnecessarily introduces non-essential features, and is not required.

Therefore, the application meets the requirements of Article 123(2) EPC.
Novelty

The manner of attaching the sleeve 37 to the fixed crank pin 13 (page 3, lines 70-75), the axial gap between the sleeve 37 and the end portions 14, 15 and the radial gap between the sleeve 37 and the pin 13 shown in Figures 2, 3, and 9 indicate that the sleeve 37 is floating relative to the crank pin 13. The roller 37 will be off-centre relative to the spindle 13 in Figure 3, with the roller engaging the spindle adjacent the flexible tube 7.

The tubular sleeve 37 is thus not a wheel, the sleeve does not have a fixed axis about which it may rotate, and in consequence the sleeve does not rotate about a second central axis. Therefore, the subject-matter of claim 1 (main request and auxiliary request I) is new (Article 54 EPC).

Furthermore, the title and first sentence of document D1 refer to a "clamp closure". There is no mention anywhere in document D1 about adjusting or controlling fluid flow through the flexible conduit in a range of settings. As sleeve 37 is capable of radial movement relative to the crank pin 13, the control of the compression of the flexible conduit 7 is uncertain and pressure fluctuations inside the flexible conduit 7 could cause the sleeve 37 to move radially relative to the crank pin 13 and the conduit 7. Therefore, document D1 discloses a system in which the flexible tube is either fully open or fully closed and thus does not disclose a second wheel which adjusts the flow cross-sectional area of the flexible conduit between fully open and fully closed.
Therefore, the subject-matter of claim 1 (auxiliary requests II and III) is new (Article 54 EPC).

Reasons for the Decision

1. Main Request

Added subject-matter, Article 123(2) EPC

A "convex surface portion" was not mentioned in the application as filed. Instead, the description repeatedly describes the function of the stationary member 20 ("supports a first region 24 of the outer surface 16 of the flexible conduit 14"; see column 3, lines 40-42, column 4, lines 23-25 and 44-46, column 5, lines 39-40) and provides a description of the stationary member 20 in terms of a "pin 48" (column 6, lines 7-11). In addition, figures 1 to 3 concern an embodiment of the invention and show a stationary member 20 whose main body is drawn as a cylinder (figure 1) with a circular cross section (figures 2 and 3).

The portion of the stationary member which engages the first region 24 of the outer surface of the flexible conduit 14 is not discussed as such in the application as filed. The person skilled in the art is therefore not immediately and unambiguously presented with the teaching that "the only portion of the stationary member 20 which forms part of, or is used in, the invention is the convex surface portion which engages the first region 24 of the outer surface of the
flexible conduit 14. The remaining parts of the stationary member are irrelevant to the invention and have no bearing on the operation of the invention”.

In particular, as the description (in this case figures 1 to 3) only discloses an embodiment with a pin 48 which has a main body in the form of circular cylinder, there is no teaching to the effect that another kind of convex surface, or indeed any convex surface, is suitable for the purposes of the invention. The term "convex" introduces a level of generalisation which was not originally disclosed.

To arrive at the above teaching, the person skilled in the art would first have to seek an answer to the questions, "which part of the stationary member has a bearing on the operation of the invention?" and "which property of that part is required to achieve the desired effect?". The answer to the effect that "a stationary member (20) having a convex surface portion adapted to support a first region (24) of the outer surface of the flexible conduit" is therefore at least one deductive step away from the explicit disclosure of the application documents as filed.

Therefore, the "convex surface portion" feature included in claim 1 according to the main request cannot be considered to be directly and unambiguously derivable from the application documents as filed and, in consequence, extends the subject-matter of claim 1 beyond the content of the application as filed.

Furthermore, the wording of Article 123(2) EPC leaves no doubt that a European patent application may not be
amended in such a way that it contains subject-matter which extends beyond the content of the application as filed. This limitation is absolute and does not depend on the nature of the added subject-matter. Therefore, the appellant cannot overcome the restrictions imposed by Article 123(2) EPC and add subject matter after the filing of the application merely because the proposed subject matter allegedly provides an improved definition of essential features of the invention.

In addition, the EPC does not prohibit claims from containing other features in addition to the essential features of the invention. In consequence, avoiding such inessential features cannot be used as an argument to justify introducing amendments contrary to Article 123(2) EPC.

The feature "a convex surface portion" constitutes a level of generalisation which was not originally disclosed and claim 1 (main request) thus does not comply with the requirements of Article 123(2) EPC.

2. Auxiliary Request I

2.1 Added subject matter, Article 123(2) EPC

Although the wording "cylindrical shape" in feature a) of claim 1 is not as such used in the application as filed, it was already argued above in section 1 that it is clear from the schematic drawings of the embodiment (figures 1 to 3 of the A2 publication), that pin 48 has a main body which has a "cylindrical shape" which is adapted to support a region 24 of the outer surface of the flexible conduit.
The wording "cylindrical shape" used feature a) of claim 1 therefore does not extend the subject-matter of the claims beyond the content of the application as filed so that the requirement of Article 123(2) EPC is met.

2.2 Novelty, Article 54 EPC

Document D1 constitutes the closest prior art and discloses a sleeve 37 which can rotate freely around the shaft 13 (page 3, lines 60-62). The effect of this arrangement is that the sleeve rotates and rolls on the surface of the flexible conduit as the shaft 13 is itself swung into, or out of, the position shown in figure 3 (page 3, lines 62-65). The sleeve 37 is therefore indistinguishable from the "second wheel" in feature c) of the valve according to claim 1 of the present request.

Although the appellant considers that tubular sleeve 37 is not a wheel, no reasons are given for this assertion. Claim 1 does not provide any additional features which might serve to distinguish the claimed second wheel 36 from the sleeve 37. Even if the schematic drawings in the application as filed and the prior art document D1 are interpreted as showing the second wheel 36 and the sleeve 37 differing in size and proportions, such features are neither claimed in auxiliary request I nor described in the application as filed. Furthermore, no differing technical effect is apparent for particular wheel dimensions or proportions.
The appellant further considers that, because the prior art sleeve 37 is held in a floating arrangement on shaft 13, there is no fixed axis about which sleeve 37 rotates and, in consequence, sleeve 37 does not rotate about a "second central axis".

However, the Board is of the opinion that the skilled person knows that without a gap the wheel and its shaft would form a rigid assembly and no rotation would be possible. With a sufficient gap, the wheel will rotate freely or loosely ("lose drehbar") about its shaft. This is the case in document D1 (page 3, lines 60-65) with the shaft 13 forming the central axis of rotation for the sleeve 37. Bounds on the looseness of the fit between the wheel and its shaft are neither discussed in the application as filed, nor limited in claim 1 of auxiliary request I. Therefore, the Board cannot accept that the tubular sleeve 37 shown in document D1 is not a "second wheel" in the sense of claim 1.

In consequence, the subject matter of claim 1 according to auxiliary request I is not new.

3. Auxiliary Request II

Added subject matter, Article 123(2) EPC

The wording of feature a) of claim 1 according to Auxiliary Request II is identical to that of the main request.

The additional feature appended to feature c) of claim 1 according to Auxiliary Request II concerns the range of adjustment of the flow cross sectional area of
the flexible conduit and thus does not concern the shape of the stationary member 20.

In consequence, the inclusion of the expression "convex surface portion" in feature a) extends the subject-matter of claim 1 according to Auxiliary Request II beyond the content of the application as filed for the reasons already set out above in section 1 in the context of the main request (Article 123(2) EPC).

4. **Auxiliary Request III**

4.1 **Added subject matter, Article 123(2) EPC**

The additional feature appended to the end of feature c) of claim 1 concerning the range of adjustment of the flow cross sectional area of the flexible conduit was disclosed in dependent claim 11 as originally filed.

Furthermore, for the reasons already set out in section 2.1 above, the wording "cylindrical shape" used in feature a) of claim 1 according to auxiliary request III adds subject-matter so that the requirement of Article 123(2) EPC is satisfied.

4.2 **Novelty, Article 54 EPC**

The Board cannot agree with the appellant's argument that document D1 merely discloses a system in which the flexible tube is either fully open (figure 2) or fully closed (figure 3).
The appellant translates the term "Quetschverschluss" as "clamp closure" and concludes that document D1 discloses a system in which the flexible tube is either fully open or fully closed. However, the term "Quetschverschluss" may also be translated as "pinch valve" and does not imply that the flexible tube in the device according to document D1 can only be either fully open or fully closed. Furthermore, document D1 does not contain any passage which suggests such a limitation.

To close the keg-tap ("Fasshahn", page 1, lines 1-7) according to document D1, the crank 13 is rotated from the fully open position shown in figure 2 through 180° by means of the handle 27 to reach the fully closed position shown in figure 3 (page 3, lines 41 to 50). When thus operated, the crank must swing through intermediate positions in which the sleeve 37 will increasingly squeeze shut the flexible conduit 7, thereby reducing the available flow cross sectional area through the conduit 7: when the handle 27 is moved further towards the fully closed position shown in figure 3, the flow through the flexible conduit 7 is reduced; when the handle 27 is moved further towards the fully open position shown in figure 2 the flow through the flexible conduit 7 is increased. It is simply not possible for the valve to move from the open position fully open position of figure 2 to the fully closed of figure 3 without passing through such intermediate positions. The Board therefore concludes that the keg-tap disclosed in document D1 permits adjusting the flow cross-sectional area of the flexible conduit in a range
between a substantially full-flow state (figure 2) and a substantially zero-flow state (figure 3).

The appellant further alleges that because the sleeve 37 is capable of radial movement relative to the crank pin 13, the control of the compression of the flexible conduit 7 is uncertain and cannot be accurately controlled and that pressure fluctuations inside the flexible conduit 7 could cause the sleeve 37 to move radially relative to the crank pin 13 and the conduit 7. However, even if such were the case, claim 1 according to Auxiliary Request III does not place any limits on the accuracy or quality of the achievable flow control.

In consequence, the subject matter of claim 1 according to auxiliary request III is not new.

5. **Reimbursement of the appeal fee**

According to Rule 103(1)(a) EPC, the appeal fee is to be reimbursed if the Board deems the appeal to be allowable and if the reimbursement is equitable due to a substantial procedural violation. Apart from the fact, that the appeal is not allowable, the Board cannot agree that a substantial procedural violation, as alleged by the appellant, occurred during the proceedings before the examining division.

5.1 According to the minutes of the telephone interview 7 January 2007, i.e. on the day before the oral proceedings before the examining division, the appellant was informed that contrary to the preliminary opinion expressed in the summons to oral proceedings,
the examining division (in a new composition) was of the opinion that document D1 is novelty destroying for the subject matter of claim 1, either with the feature "convex surface" or "cylindrical shape" for the stationary member and that the applicant should therefore expect that the questions of novelty and inventive step will also have to be discussed during the oral proceedings, if necessary.

A lack of novelty objection had already been raised on the basis of document D1 in the written procedure (examination report dated 7 September 2006) in relation to certain claims, including original claim 9 which is essentially similar to claim 1 according to the main request.

The appellant should be aware that a preliminary opinion in the summons to oral proceedings is not binding on the examining division and that amendments made to the wording of a claim will require the claim to be subsequently examined for compliance with the EPC, because, for a patent to be granted, all the requirements set out in Article 52(1) EPC must be met, i.e. including novelty and inventive step (Articles 54 and 56 EPC). Furthermore, documents already in the proceedings, such as document D1, are liable to be taken into account during such an examination.

If the appellant nevertheless felt taken by surprise by developments during the examination procedure, then a reasonable request for additional time could have been presented to the examining division. However, according to the minutes of oral proceedings before the examining division, the appellant declared having no further
requests. These minutes were, furthermore, not contested in this respect.

In consequence, the appellant's right to be heard was not infringed in the context of alleged procedural violation (a).

5.2 As set out in sections 3 and 4 of the decision under appeal, the application in suit was refused for reasons of added subject matter (Article 123(2) EPC), so that the procedure before the examining division never progressed to the stage where a discussion of novelty and inventive step could take place.

The further remarks concerning novelty and inventive step (section 5 of the decision under appeal) provided at the end of the decision do not affect the substance of the decision, which is concerned with added subject matter (Article 123(2) EPC). The mere fact that the examining division added further remarks to the end of their decision does not alter the substance of the decision and these additional remarks are, in effect, not relevant to the decision to refuse the application.

The Board cannot see how the appellant's right to be heard (Article 113(1) EPC) could have been infringed in the context of a refusal for reasons of added subject matter (Article 123(2) EPC) with respect to a discussion of novelty (Article 54 EPC) and inventive step (Article 56 EPC) which had no reason to be and in consequence did not take place.
In consequence, the appellant's right to be heard was not infringed in the context of alleged procedural violation (b).

5.3 Section 2, "facts and submissions" of the decision under appeal, does not contain the expression "cylindrical surface portion". The appellant's allegation that the reported facts are incorrect therefore cannot be followed.

The only paragraph of the contested decision in which the expression "cylindrical surface portion" appears is in section 3, "Reasons for the Decision", where it is argued that the use of the term "convex" is a generalisation with respect to the term "cylindrical" (page 3, lines 15 to 18) and that this generalisation is not directly and unambiguously derivable from the original application documents (page 5, lines 4 to 8). Therefore the relevant arguments of the decision concern the use of the term "convex" as a generalisation with respect to the term "cylindrical", contrary to Article 123(2) EPC (page 5, last two lines).

The contested decision does not contain any discussion concerning the use of the term "shape" versus "surface portion", nor does the decision base or draw any conclusions from the use of one or the other of these terms.

Therefore, the Board cannot see how the appellant's right to be heard (Article 113(1) EPC) could have been infringed by a reference to the expression "cylindrical
surface portion" as used in section 3 of the decision under appeal.

The appellant alleges that the "Reasons for the Decision" do not "accurately reflect the discussions which took place at the oral proceedings". In so doing, the appellant appears to misunderstand the purpose of the "Reasons for the Decision", which is to set out, in logical sequence, those arguments which justify the decision reached. On the other hand, the summary of the oral proceedings may be found in the minutes.

Furthermore, as the only alleged discrepancy raised by the appellant concerns the use of the terms "surface portion" instead of "shape", which, as set out above, has no substantive effect on the decision under appeal, the appellant's right to be heard was not infringed in the context of alleged procedural violation (c).

5.4 The Board has therefore come to the conclusion that the examining division did not commit a procedural violation, let alone a substantial one.

Therefore, the appellant's request that the appeal fee be reimbursed is rejected.

6. Question for the Enlarged Board of Appeal

The EPC (Part IV, "Appeals Procedure") and the Rules of Procedure of the Boards of Appeal, (OJ EPO 11/2007, page 536 onwards) set out the procedure by which applicants can challenge decisions from the EPO. The appellant is aware of these procedures since he has filed the present appeal.
Therefore, the question "Can an applicant challenge any decision from the EPO when the written facts concerning oral proceedings are incorrect or disputed, and what rights does an applicant have for making such a challenge?" is, at least partially, answered in the EPC (Part IV, "Appeals Procedure") and the Rules of Procedure of the Boards of Appeal, (OJ EPO 11/2007, page 536 onwards).

Furthermore, as set out in section 5.3 above, the appellant considers incorrect "the reporting of the oral proceedings" only with respect to the use of vocabulary which has no substantial bearing on the decision. In consequence, the question to be referred to the Enlarged Board neither raises an issue concerning the uniform application of the law nor does it concern assessing an important point of law.

Consequently, the Board does not consider it appropriate to refer the question mentioned above under point III to the Enlarged Board of Appeal in accordance with Article 112(1)(a) EPC.
Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

D. Meyfarth

The Chairman:

P. Michel