Internal distribution code:
(A) [ - ] Publication in OJ
(B) [ - ] To Chairmen and Members
(C) [ - ] To Chairmen
(D) [ X ] No distribution

Datasheet for the decision of 30 November 2018

Case Number: T 1617/13 - 3.2.02

Application Number: 04255325.5

Publication Number: 1512418

IPC: A61M1/36

Language of the proceedings: EN

Title of invention:
Peristaltic pump apparatus for an extracorporeal blood circuit

Patent Proprietor:
THERAKOS, INC.

Opponent:
Fresenius Medical Care Deutschland GmbH

Headword:

Relevant legal provisions:
EPC Art. 56, 100(a)
EPC R. 99(2), 115(2)
RPBA Art. 12(2), 15(3)
Keyword:
Admissibility of appeal - (yes)
Inventive step - (yes)

Decisions cited:
T 0220/83, T 0493/95, R 0013/13

Catchword:
DECISION
of Technical Board of Appeal 3.2.02
of 30 November 2018

Appellant: Fresenius Medical Care Deutschland GmbH
(Opponent)
Else-Kröner-Strasse 1
61352 Bad Homburg (DE)

Representative: Herrmann, Uwe
Lorenz Seidler Gossel
Rechtsanwälte Patentanwälte
Partnerschaft mbB
Widenmayerstraße 23
80538 München (DE)

Respondent: THERAKOS, INC.
(Patent Proprietor)
437 Creamery Way
Exton, PA 19341 (US)

Representative: Jones, Nicholas Andrew
Withers & Rogers LLP
4 More London Riverside
London, SE1 2AU (GB)

Decision under appeal: Interlocutory decision of the Opposition
Division of the European Patent Office posted on
23 April 2013 concerning maintenance of the

Composition of the Board:
Chairman: E. Dufrasne
Members: P. L. P. Weber
M. Stern
Summary of Facts and Submissions

I. The appeal of the opponent is directed against the interlocutory decision of the Opposition Division posted on 23 April 2013 that account being taken of the amendments according to the first auxiliary request made by the proprietor during the opposition procedure, the patent and the invention to which it relates were found to meet the requirements of the EPC.

II. The appellant/opponent filed the appeal on 3 July 2013 and paid the appeal fee on the same day.

III. The statement setting out the grounds of appeal was filed on 26 August 2013. This statement included a request to revoke the patent and reasons as to why the subject-matter of claim 1, which had been considered allowable by the Opposition Division, was not inventive in view of a combination of D1 with D2. The statement further included reasons as to why the subject-matter of claim 1 was not inventive over D2 in combination with the common general knowledge or with D1. For these latter reasons, the appellant/opponent referred to point b) on pages 9 and 10 of its notice of opposition dated 15.07.2010 where it was explained why the first four features of claim 1 were disclosed in D2. Documents D1 and D2 were not explicitly identified in the statement setting out the grounds of appeal.

IV. Oral proceedings were held on 30 November 2018.

Although having been duly summoned by communication dated 20 September 2018, the appellant/opponent was not present, as announced by letter dated 23 October 2018. In accordance with Rule 115(2) EPC and Article 15(3) RPBA, the proceedings continued without this party.
The appellant/opponent requested in writing that the decision under appeal be set aside and the patent be revoked.

The respondent/patent proprietor requested that the appeal be dismissed or, in the alternative, that the decision under appeal be set aside and that the patent be maintained on the basis of one of the first to the eighth auxiliary requests, all filed with letter dated 30 October 2018.

V. Claim 1, as considered allowable by the Opposition Division, reads as follows (it is the combination of claims 1 and 2 of the patent as granted):

"A peristaltic pump apparatus (1301) comprising:

a rotor (1314) rotatably mounted about a rotor axis;

a housing (1315) having a curved wall (1317) surrounding at least a portion of the rotor and forming a tube pumping region (1318) between the rotor and the curved wall;

the rotor comprising at least one drive roller (1327) for progressively compressing a loop of tubing (1121) against the curved wall;

the rotor comprising a flange (1325) above the housing and an angled guide (1324) extending upward from the flange for displacing the loop of tubing toward the flange upon the rotor being rotated in a forward direction;
the flange having an opening (1333) with a leading edge (1334) and a trailing edge (1335) for capturing and feeding the loop of tubing into the tube pumping region upon the rotor being rotated in the forward direction; and

wherein the trailing edge is higher than the leading edge,

characterised by;

a means to lift a portion of the loop of tubing to a raised position when the loop of tubing is in the tube pumping region so that upon the rotor being rotated in a reverse direction the leading edge contacts and removes the loop of tubing from the tube pumping region

wherein the flange has a top surface, the trailing edge extending upward from the top surface.”

VI. The documents cited in the decision are the following:

D1: EP-A-0 663 529
D2: EP-A-0774 266

VII. The arguments of the appellant/opponent submitted in writing can be summarised as follows (more details are given in the reasons below):

The subject-matter according to claim 1 was not inventive in view of the following combinations:

D1 and D2
D2 and common general knowledge
D2 and D1
VIII. The arguments of the respondent/patent proprietor can be summarised as follows (more details are given in the reasons below):

The appeal was not admissible because it did not comply with Article 12(2) RPBA.

The subject-matter according to claim 1 was inventive.

Reasons for the Decision

1. The respondent/patent proprietor considered that the appeal was not admissible because it did not comply with Article 12(2) RPBA due to the following: the appellant/opponent did not provide full reasons when alleging that the subject-matter of claim 1 was not inventive in view of D2 in combination with common general knowledge or with D1, it did not address all the reasons for the decision, it did not identify the documents D1 and D2, and it did not provide any evidence for the alleged common general knowledge.

According to Article 12(2) RPBA and the corresponding established jurisprudence expressed in many decisions (e.g. T 220/83, OJ EPO 1986, 249; T 493/95), the statement of the grounds of appeal should specify the legal or factual reasons on which the case for setting aside the decision is based. The arguments must be clearly and concisely presented to enable the board and the other party or parties to understand immediately why the decision is alleged to be incorrect, and on what facts the appellant bases its arguments, without first having to make investigations of their own.

This is the case here. Indeed, the statement setting out the grounds of appeal contains the request to
revoke the patent and reasons as to why the Board
should so decide, since at least the objection of lack
of inventive step starting from D1 in combination with
D2 is properly substantiated, which was accepted by the
respondent/patent proprietor itself.

While it is true that documents D1 and D2 are not
formally identified in the appeal proceedings, this is
also not necessary in the present case since there is
no doubt that the same documents as those identified
with the same references in the impugned decision are
the ones meant. This is clear, at the latest when
reading the substantiation since reference signs of the
elements disclosed in the documents are cited together
with the corresponding features of the claim discussed.

Because this objection of lack of inventive step is
substantiated, there is no need for the assessment of
the admissibility of the appeal to examine the other
objections presented.

The Board notes that when requesting the revocation of
the patent it is enough for the appellant to provide
one substantiated line of argument as to why the Board
should follow its request.

Hence, the statement setting out the grounds of appeal
fulfils the requirements of Rule 99(2) EPC and Article
12(2) RPBA, and the appeal is admissible.

2. The invention

The invention is about a peristaltic pump which can
automatically load and unload the tube in which the
fluid is to be circulated by the pump. The rotor of the
pump has a flange with an angled guide pushing the tube
into contact with the flange and an opening in the flange with a leading edge and trailing edge (clockwise rotation) whereby the trailing edge is higher than the leading edge. The tube to be loaded is fetched by the trailing edge of the opening and forced to enter the pump. For the unloading an actuator raises the tube to be unloaded so that the leading edge can fetch it when the rotor is rotated counter-clockwise.

3. The only ground for opposition raised is lack of inventive step. The appellant/opponent presented lines of argument against claim 1 starting either from D1 or from D2.

3.1 Inventive step - closest prior art

The feature of claim 1 "the rotor comprising at least one drive roller (1327) for progressively compressing a loop of tubing (1121) against the curved wall;" is an indication that the peristaltic pump claimed is of the
type which compresses the tube in order to push the fluid in it.

This is a different pumping principle from peristaltic pumps in which the tube is stretched in order to push the fluid in it (column 1, lines 22 to 31 of D2).

The peristaltic pump described in D1 is of the same type as that claimed in claim 1 (column 3, lines 24 to 28), whereas the pump described in D2 is of the other type (column 2, lines 57 to 59).

Therefore, in the Board’s opinion D1 is the closest prior art.

3.2 Inventive step - starting from D1

D1 discloses a peristaltic pump that includes features facilitating the loading of the disposable tubing into the pump. This peristaltic pump has all the features according to the first part of claim 1. It comprises a rotor 20 rotatably mounted about a rotor axis and a housing 24 which has a curved wall 24a surrounding at least a portion of the rotor and forms a tube pumping region between the rotor and the curved wall. The rotor comprises at least one drive roller 30 for progressively compressing a loop of tubing 12 against the curved wall. The rotor also comprises a flange 36 above the housing and an angled guide (groove 18) extending upward from the flange for displacing the loop of tubing toward the flange upon the rotor being rotated in a forward direction. The flange has an opening or notch 26 with a leading edge 40 and a trailing edge 42 for capturing and feeding the loop of tubing into the tube pumping region upon the rotor being rotated in the forward direction (column 3, lines
16 to 21). As can be seen in Figures 2 and 4 the trailing edge 42 is higher than the leading edge 40.

Therefore, the differentiating features are the two last features of the claim, i.e. the characterising portion.

The respondent/patent proprietor considers that the feature that "an angled guide (1324) extending upward from the flange for displacing the loop of tubing toward the flange upon the rotor being rotated in a forward direction" required by claim 1 was also not disclosed in D1.
The geometric quality of the angled guide is not defined more precisely in the claim. Consequently the Board agrees with the Opposition Division that the curved groove 18 above the flange 36 in D1 is such an angled guide. Indeed, the upper part of the half-circle defining the groove 18 is angled and for displacing the tubing 12 toward the flange; the lower part of that half-circle does not play any role in that respect.

The respondent/patent proprietor further considers that the feature that the trailing edge of the opening should be higher than the leading edge was also not disclosed because Figure 4 was not precise enough.

Figure 4 depicted below, is not of schematic nature, and it can be seen that the trailing edge 42 is higher than the leading edge 40. Therefore, the person skilled in the art would recognise this feature on this figure and would do so all the more given that this feature is also at least partly visible in Figure 2 (see above) and Figure 6. Subsequently the person skilled in the art would not have any doubt that this feature was intentionally presented in that way in D1.
In its statement setting out the grounds of appeal the appellant/opponent considered that the person skilled in the art, starting from D1 and wishing to improve the loading of the tubing into the pump, would take over the flared portion 24 disclosed in D2 and, if necessary, would adapt the edge so as not to disturb the entering of tubing 12 into groove 18.

D2 discloses a fluid delivery device including a peristaltic pump working by extension or stretching of the tubing (column 1, lines 28 to 31) as opposed to compression of the tubing. The tubing 26 is attached to a cassette 34 introduced into the surgical console 38. When the cassette 34 is introduced into the surgical console 38, the rotor of the peristaltic pump is rotated and an elevated edge 24 (flared portion) of its generally circular closing plate fetches the tubing so as to introduce it into the pump (Figure 4, column 2, line 54 to column 3, line 4: “In use, cassette 34 containing pump tube 26 is installed within cassette receiving portion 36 of surgical console 38 so that pump tube 26 is pressed against outer plate 18 of roller head 12. In order to provide peristaltic pumping action, pump tube 26 must be stretched over rollers 20 contained in roller head 12. To assist is this process, flared portion 24 of outer plate 18 projects out from outer plate 18. As roller head 12 is rotated, flared portion 24 engages pump tube 26, thereby threading pump tube 26 over rollers 20.”).
In the Board’s opinion, it is already questionable whether the person skilled in the art would look at D2 at all because it concerns a different type of pump, and the tubing loop to be fetched by the pump is arranged within a cassette. In any case, even if the person skilled in the art did consider that document, it would not take over the raised trailing edge because this edge would disturb the loading of the tubing 12 into the groove 18 of the pump in D1. Indeed, it is clear from Figures 2 to 4 of D1 that a raised trailing edge 42 would interfere with the space necessary for
introducing the tube 12 into the groove 18, since at least half the tubing section would be outside the groove. Moreover, since it is foreseen in D1 that the groove can be partially filled with a bushing 66 to diminish friction between the tubing 12 and the groove 18 of rotor 20 when the latter rotates, this bushing could no longer be used in that device if the trailing edge of the opening or notch 26 were raised.

Additionally, as expressed in the paragraph of D2 reproduced above, in the device disclosed therein, the tube is pressed against the outer plate 18 of roller head 12 when the cassette is introduced into the surgical console, and that outer plate 18 is not provided with any central raised portion as in the pump according to D1, which means that the flared portion 24 is specifically adapted to function under this condition. This is a different technical situation from the one disclosed in D1, in which the tubing is held underneath the level of the flange by tubing manifold 14, which as such already facilitates the loading of the tubing in comparison to the situation in D2 in which, as explained, the tubing lies flat on the plate 18 and must be fetched to be loaded. Therefore, it is also not obvious that a raised trailing edge would bring any advantage for the loading of the tubing in the device according to D1, constituting a further reason why the subject-matter of claim 1 is not obvious for the person skilled in the art starting from D1 in combination with D2.

3.3 Inventive step - starting from D2

Under the problem-solution approach used to examine inventive step, one important step is to determine the closest prior art, i.e. the most promising springboard
towards the invention. Taking this step avoids examining several other less promising starting points, i.e. less likely to lead to the invention in an obvious way. It follows from this that when obviousness has been examined starting from the closest prior art and the subject-matter of the claim has been found to be inventive, it may no longer be necessary to check its inventiveness starting from another document. This way of proceeding has been accepted by the Enlarged Board of Appeal, for instance in R 0013/13, in particular point 15 of the reasons. This applies in the present case where D2 is clearly less promising than D1 (point 3.1 above).

3.4 For the reasons above, the requirements of Article 56 EPC are fulfilled, and the ground for opposition of lack of inventive step pursuant to Article 100(a) EPC therefore does not prejudice the maintenance of the patent as amended according to the main request.
Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

M. Canueto Carbajo E. Dufrasne

Decision electronically authenticated