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**Datasheet for the decision
of 20 October 2015**

Case Number: T 1625/14 - 3.2.08

Application Number: 10182791.3

Publication Number: 2260802

IPC: A61F7/00, A61F7/12

Language of the proceedings: EN

Title of invention:
Methods and apparatus for regional and whole body temperature modification

Applicant:
ZOLL Circulation, Inc.

Headword:

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

Keyword:

Decisions cited:

Catchword:



**Beschwerdekammern
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Case Number: T 1625/14 - 3.2.08

**D E C I S I O N
of Technical Board of Appeal 3.2.08
of 20 October 2015**

Appellant: ZOLL Circulation, Inc.
(Applicant) 249 Humboldt Court
Sunnyvale, CA 94089 (US)

Representative: Maughan, Sophie Louise
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Decision under appeal: **Decision of the Examining Division of the
European Patent Office posted on 10 March 2014
refusing European patent application No.
10182791.3 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman T. Kriner
Members: M. Alvazzi Delfrate
D. T. Keeling

Summary of Facts and Submissions

- I. By its decision posted on 10 March 2014 the Examining Division refused European patent application No. 10182791.3, because it was of the view that none of the requests then on file met the requirements of Article 123(2) EPC.
- II. The appellant (applicant) lodged an appeal against that decision in the prescribed form and within the prescribed time limit.
- III. Oral proceedings before the Board of Appeal were held on 20 October 2015. At the end of the oral proceedings the appellant requested as a Main Request that the decision under appeal be set aside and that a patent be granted on the basis of the request filed as Auxiliary Request 3 with letter of 18 July 2014.
- IV. Claim 1 reads as follows:

"A heat transfer catheter system useable for controlling body temperature of a mammalian patient by exchanging heat with blood that is flowing through the patient's vasculature, wherein the heat transfer catheter system comprises a) a heat exchange catheter (302, 304) comprising an elongate, flexible catheter body having a proximal end, a distal end, a heat exchange medium inflow lumen, a heat exchanger and a heat exchange medium outflow lumen, the distal end of the catheter body and the heat exchanger being located on a distal insertion portion which is insertable into the vasculature of the subject such that the heat exchanger is operative to exchange heat between blood that flows through the subject's vasculature in heat

exchange proximity of the heat exchanger and heat exchange fluid circulating through said heat exchanger, b) a heater/cooler device (341) that comprises a housing and heater/cooler (342) within the housing, c) at least one sensor for sensing the patient's body temperature, d) a manual input device useable for inputting a target body temperature, e) a pump for circulating heat exchange medium through the heat transfer catheter system, said pump comprising a heat exchange medium-contacting component which is disposable and a pump driving component in the housing which is reusable and f) a controller unit (120, 300, 341) which receives signals from said at least one temperature sensor and from said manual input device and, in response to those received signals, controls the operation of the heater/cooler and/or the pump to cause the heat exchange catheter to remove heat from the subject's flowing blood or add heat to the subject's flowing blood as needed to adjust the sensed body temperature to, or to maintain the sensed body temperature within, a predetermined variance of the target body temperature:

the heat transfer catheter system being further characterized by the inclusion of :

(a) a heat exchange component (338) adapted to contain a heat exchange medium, the heat exchange component having i) a heat exchange medium pathway (339) formed therein, ii) an inlet through which heat exchange medium may enter the heat exchange pathway and iii) an outlet through which heat exchange medium may exit the heat exchange medium pathway,

the heat exchange component (338) being insertable into an opening in the housing of the heater/cooler device such that the heater/cooler will heat or cool heat exchange medium that circulates through the heat exchange medium pathway of the heat exchange component;

(b) tubing (337) having a first lumen (333) and a second lumen (335), one end of the first lumen (333) being connected to the outlet of the heat exchange component and the other end of the first lumen (333) being adapted for connection to the inflow lumen of the catheter such that heat exchange medium exiting the heat exchange medium pathway (339) of the heat exchange component (338) will pass out of the outlet of the heat exchange component, through the first lumen (333) of the tubing (337), through the heat exchange medium inflow lumen of the catheter and into the heat exchanger of the catheter; and one end of the second lumen (335) being connected to the inlet of the heat exchange component and the other end of the second lumen (335) being adapted for connection to the outflow lumen of the catheter such that heat exchange medium will flow from the heat exchanger of the catheter, through the catheter's outflow lumen, through the second lumen (335) of the tubing, through the inlet of the heat exchange component (338) and into the heat exchange medium pathway (339) of the heat exchange component (338); and (c) a tube for connecting a reservoir bag (999) that contains heat exchange medium to prime the system with heat exchange medium such that heat exchange medium from the reservoir bag (999) fills a closed-loop flow path that comprises the interconnected first and second lumens (333, 335) of the tubing (337), the heat exchange medium pathway (339) of the heat exchange component (338), the heat exchange medium-contacting component of the pump and the inflow lumen, outflow lumen and heat exchanger of the catheter, the heat exchange medium-contacting component of the pump being installable in the housing such that activation of the pump driving component causes heat

exchange medium to circulate through the closed-loop flow path."

- V. The arguments of the appellant can be summarised as follows:

The subject-matter of present claim 1 is disclosed in the originally filed documents of the application in suit, and of the parent and the grandparent applications, in particular in the parts relating to the embodiment shown in Figure 16, also in view of the fact that the description discloses that different type of pumps can be used.

Reasons for the Decision

1. Article 76(1) and 123(2) EPC

The application in suit is a divisional application of D1: EP -A- 1 808 151, which in turn is a divisional application of D0: WO -A- 00/10494. Hence, the subject-matter of claim 1 must not extend beyond the content of each of D0 and D1 (Article 76(1) EPC) and beyond the content of the application in suit as originally filed (Article 123(2) EPC).

- 1.1 In respect of D0 claim 1 essentially corresponds to the embodiment in Figure 16 and the corresponding description on page 44, line 22 to page 47, line 15, which relate to a heat transfer catheter system that comprises a heat exchange component (338) that can be installed into the housing of a heater/cooler device 341. The gist of this embodiment is that the system comprises disposable components in contact with the patient and reusable components that comprise the

relatively expensive portions of the system (page 44, line 22 to page 45, line 2; and page 49, lines 5 to 7). In particular, in the device shown in Figure 16, the pump which causes the heat exchange medium to circulate comprises a pump driving reusable component in the form of a pump drive 343 in the housing and a disposable heat exchange medium-contacting component in the form of a pump head included in the heat exchange component insertable in the housing.

The pump of present claim 1, which merely comprises a pump driving reusable component in the housing and a disposable heat exchange medium-contacting component installable in the housing such that activation of the pump driving component causes heat exchange medium to circulate through the closed-loop flow path is a generalisation of the pump of the device shown in Figure 16. Therefore, it must be assessed whether this generalisation is directly and unambiguously derivable, using common general knowledge, from the application D0 as originally filed.

D0 discloses in the paragraph bridging pages 49 and 50 that the system shown in Figure 16 ("the system described here in detail") may be varied, for instance by using a screw pump, a gear pump, a diaphragm pump, a peristaltic roller pump, or any other suitable means for pumping the heat exchange fluid. In view of this passage it is clear for the person skilled in the art, who is familiar with these different types of pump, that the disposable component of the pump is not necessarily a component which can be referred to as a pump head. This is for instance the case in view of a peristaltic pump. For this type of pump it is also clear that the reusable component does not need to be included in the heat exchange component, but merely

needs to interact with the the other, reusable, component of the pump and be installable in the housing, which comprises the latter component.

Therefore, present claim generalises the embodiment of Figure 16 in a way which does not introduce subject-matter that extends beyond the content of D0. Accordingly, the requirements of Article 76(1) in respect of D0 are satisfied.

- 1.2 The same applies when considering the requirements of Article 76(1) in respect of D1 and Article 123(2) EPC in respect of the application in suit as originally filed.

2. Since the decision under appeal dealt solely with the issue of Article 123(2) EPC and did not consider further requirements of the EPC, in particular novelty and inventive step, the Board considers it appropriate to remit the case to the Examining Division 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 Examining Division for further prosecution on the basis of the new Main Request, filed as the third Auxiliary Request with letter of 18 July 2014.

The Registrar:

The Chairman:



V. Commare

T. Kriner

Decision electronically authenticated