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**Datasheet for the decision
of 10 May 2011**

Case Number: T 0896/08 - 3.2.02

Application Number: 99926649.7

Publication Number: 1121168

IPC: A61M 15/00

Language of the proceedings: EN

Title of invention:
Improvements in drug delivery devices

Applicant:
Consort Medical Plc

Opponent:
-

Headword:
-

Relevant legal provisions:
EPC Art. 56

Relevant legal provisions (EPC 1973):
-

Keyword:
"Inventive step (yes, after amendments)"

Decisions cited:
-

Catchword:
-



Case Number: T 0896/08 - 3.2.02

D E C I S I O N
of the Technical Board of Appeal 3.2.02
of 10 May 2011

Appellant: Consort Medical Plc
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Decision under appeal: Decision of the Examining Division of the
European Patent Office posted 20 November 2007
refusing European patent application
No. 99926649.7 pursuant to Article 97(1) EPC
1973.

Composition of the Board:

Chairman: D. Valle
Members: C. Körber
A. Pignatelli

Summary of Facts and Submissions

I. The appellant (applicant) lodged an appeal on 17 January 2008 against the decision of the examining division posted on 20 November 2007 to refuse the application for lack of inventive step. The fee for the appeal was paid the same day and the statement setting out the grounds for appeal was received on 31 March 2008.

II. The following documents are relevant for the decision:

D1 = FR - A - 2 756 502

D3 = FR - A - 2 740 527.

III. Following the communication of 8 April 2011 of the Board, the appellant filed with letter dated 15 April 2011 an amended version of the application.

The appellant requested that the decision under appeal be set aside and that a patent be granted with the following version:

- claims: 1 to 8 filed with letter dated 31 March 2008
- description: pages 1, 2, 2a, 3 to 8 filed with letter dated 15 April 2011
- drawings: Figures 1 and 2 as published.

IV. Claim 1 reads as follows:

"A metering valve (110) for use with a pressurized dispensing container (12), the valve comprising a valve stem (111) co-axially slidable within a valve member (112), said valve member (112) and valve stem (111)

defining an annular metering chamber (113), outer and inner annular seals (117, 118) operative between the respective outer and inner ends of the valve member (112) and the valve stem (111) to seal the annular metering chamber (113) therebetween, characterized in that at least a portion of the metering chamber (113) is treated to have a layer of a poly-para-xylylene polymer bonded to at least a portion of one or more internal surfaces of the metering chamber (113), so as to reduce deposition of medicament on said surfaces, wherein at least a portion of the internal surface of the valve member (112) is coated with the poly-para-xylylene polymer by vapour deposition polymerisation at or near room temperature."

- V. The appellant argued that the amendments submitted brought the patent application in compliance with the EPC. In particular the subject-matter of claim 1 involved an inventive step.

Reasons for the Decision

1. The appeal is admissible.
2. *Formal matters*

The amended claim 1 is supported by the original claims 1, 7 and 8 and by the description, page 7, lines 6-7, 11 and 16-18, and it is essentially a combination of claims 1 and 2 taken as a basis for the decision under appeal whereas - instead of an apparatus for dispensing medicaments wherein the apparatus is a metering valve - a metering valve is directly claimed.

The dependent claims correspond to the original dependent claims, renumbered.

The description has been adapted to the newly filed claims.

Accordingly, Article 123(2) EPC is met.

3. *Inventive step*

D3 as closest prior art discloses a metering valve for use with a pressurized dispensing container, the valve comprising a valve stem (10) co-axially slidable within a valve member, said valve member and valve stem defining an annular metering chamber(2), outer and inner annular seals (3, 4) operative between the respective outer and inner ends of the valve member and the valve stem to seal the annular metering chamber therebetween.

However, D3 does not disclose the characterizing part of the claim, that is that at least a portion of the metering chamber is treated to have a layer of a poly-para-xylylene polymer bonded to at least a portion of one or more internal surfaces of the metering chamber, so as to reduce deposition of medicament on said surfaces, wherein at least a portion of the internal surface of the valve member is coated with the poly-para-xylylene polymer by vapour deposition polymerisation at or near room temperature.

The distinguishing features aim at minimizing drug deposition in the metering chamber, in particular in

order to avoid that the amount of active drug delivered to the patient is reduced (see description, page 2, lines 2-6 and 29-32).

D3 does not know the purpose of the invention. On the contrary, it teaches against the invention. The purpose of D3 is to avoid blockage of the stem due to excessive friction between the stem and the walls of the chamber (see description, page 1, lines 32 - 34). The solution brought forward by D3 consists of using a mixture of PTFE and other elements as material for the stem (see page 3, lines 1-3). Therefore D3 teaches against coating the walls of the chamber as suggested by the invention. The measure proposed by the invention of providing a coating for the walls of the chamber would in fact increase friction, against the purpose of D3.

D1, see decision under appeal, point 4 of the reasons, discloses using poly-para-xylylene polymer in order to avoid deposition of material on the walls of a pulverisation chamber. The coating is applied with the modalities claimed in the claim at issue. However, D1 fails to give any hint towards coating the internal surface of a valve member of a metering chamber.

D1 is not at all concerned with metering chambers. Metering chambers are typically used in drug delivery devices such as for curing asthma. By contrast, D1 is concerned with pulverisation chambers such as those used in water atomizers (brumisateurs), hairdressing sprays, deodorants and insecticides (page 1, lines 4-6). Typically, pulverisation chambers consist of narrow conduits designed to confer a whirling movement to the ejected liquid, see D1, Figures 1a, 1b. The

pulverisation is the result of the impact of the whirling jet of liquid with the air at the exit of the exit nozzle.

Furthermore, D1 does not know the purpose of the invention. The purpose of D1 is to avoid blockage of the pulverisation conduits due to the deposition of particles on their walls and not that of the invention of avoiding reduced delivery of drug through the metering chamber.

Consequently, a combination of the teaching of D3 and D1 can not lead in an obvious way to the claimed invention.

The further documents of the available prior art cannot make the subject-matter of claim 1 obvious either.

Accordingly, the subject-matter of claim 1 complies with Article 56 EPC.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the first instance with the order to grant a patent in the following version:
 - claims: 1 to 8 filed with letter dated 31 March 2008
 - description: pages 1, 2, 2a, 3 to 8 filed with letter dated 15 April 2011
 - drawings: Figures 1 and 2 as published.

The Registrar:

The Chairman:

D. Sauter

D. Valle