

Internal distribution code:

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

**Datasheet for the decision
of 23 October 2018**

Case Number: T 1017/13 - 3.2.02

Application Number: 05763218.4

Publication Number: 1904120

IPC: A61M1/16, B01F15/04

Language of the proceedings: EN

Title of invention:

An apparatus and process for on-line preparation of a medical liquid

Patent Proprietor:

Gambro Lundia AB

Opponent:

Fresenius Medical Care Deutschland GmbH

Headword:

Relevant legal provisions:

EPC Art. 54, 56

Keyword:

Novelty (yes)
Inventive step (yes)

Decisions cited:

T 0037/82

Catchword:



Beschwerdekammern
Boards of Appeal
Chambres de recours

Boards of Appeal of the
European Patent Office
Richard-Reitzner-Allee 8
85540 Haar
GERMANY
Tel. +49 (0)89 2399-0
Fax +49 (0)89 2399-4465

Case Number: T 1017/13 - 3.2.02

D E C I S I O N
of Technical Board of Appeal 3.2.02
of 23 October 2018

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

Representative: Nordmeyer, Philipp Werner
df-mp Dörries Frank-Molnia & Pohlman
Patentanwälte Rechtsanwälte PartG mbB
Theatinerstraße 16
80333 München (DE)

Respondent: Gambro Lundia AB
(Patent Proprietor) no. 16, Magistratsvagen
22010 Lund (SE)

Representative: Ponzellini, Gianmarco
PGA S.P.A., Milano
Succursale di Lugano
Viale Castagnola, 21c
6900 Lugano (CH)

Decision under appeal: **Decision of the Opposition Division of the
European Patent Office posted on 27 February
2013 rejecting the opposition filed against
European patent No. 1904120 pursuant to Article
101(2) EPC**

Composition of the Board:

Chairman E. Dufrasne
Members: M. Stern
P. L. P. Weber

Summary of Facts and Submissions

I. The opponent lodged an appeal against the decision, posted on 27 February 2013, rejecting the opposition against European patent No. 1 904 120.

II. The following documents are relevant for the present decision:

D1: US-A-5 344 231
D2: DE-C-198 24 057
D3: EP-A-0 278 100
D4: FR-A-0 401 130
D5: US-A-5 460 446
D6: US-A-5 727 877
D7: US-A-2005/0040110
D10: DE-A-1 918 063.

III. Notice of appeal was filed on 26 April 2013, and the fee for appeal was paid the same day. A statement setting out the grounds of appeal was received on 5 July 2013.

IV. Oral proceedings were held on 23 October 2018.

The appellant (opponent) requested that the decision under appeal be set aside and that 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 the first auxiliary request filed by letter dated 21 September 2018.

V. Claims 1 and 10 of the patent (main request) read as follows:

"1. An apparatus for on-line preparation of a medical liquid, comprising:

a main line (26) for preparation of the medical liquid connected to an inlet (24) of a liquid and having at least a first injection point (29) of a concentrate;

a first injection circuit (27, 28) connected to an inlet of a first concentrate (28) and to the first injection point (29),

a first sensor (30) predisposed to emit a signal indicating a chemical-physical property of the liquid situated in the first injection circuit (27)

a control unit (22) prediposed [sic] for controlling a first pump (34) on the basis of the signal emitted by the first sensor (30), characterized in that the first injection circuit has a dilution point (33) situated between the inlet of the first concentrate (28) and the first injection point (29); and characterized in that the apparatus further comprises:

a dilution line (31) which carries a dilution liquid to the dilution point (33) at which the first concentrate is diluted;

the first pump (34) and a second pump (35) for the circulation of liquids in the first injection circuit (27, 28) and in the dilution line (31); the first sensor (30) being predisposed to emit a signal indicating a chemical-physical property of the liquid situated in the first injection circuit (27) between the dilution point (33) and the first injection point (29)."

"10. A process for on-line preparation of a medical liquid, comprising stages of:

circulating a liquid in a main preparation line (26) having at least a first injection point (29) of a concentrate;

injecting at least a first concentrate from a first injection circuit (27, 28) at the first injection point (29); characterized in that it further comprises the steps of:

injecting a dilution liquid from a dilution line (31) at a point of dilution (33) of the first injection circuit (27) for reducing an ionic concentration of the first concentrate before reaching the first injection point (29);

measuring at least a value of a chemical-physical property of the diluted first concentrate which flows in the first injection circuit (27, 28) after the point of dilution (33);

controlling at least a first flow rate of a liquid flowing in the first injection circuit (27, 28) or in the dilution line (31) on a basis of a value measured of a chemical-physical property;

controlling at least a second flow rate of a liquid flowing in the first injection circuit (27, 28) or in the dilution line (31) on a basis of a preset flow value."

VI. The arguments of the appellant which are relevant for the present decision may be summarised as follows:

- *Novelty over D1 to D6*

Document D1 did not explicitly disclose any control of the "first pump" (22) on the basis of a signal emitted from the "first sensor", the differential conductivity meter (47, 46). It was, however, implicitly disclosed,

since the differential conductivity meter served no other purpose than controlling first pump 22. Moreover, column 3, lines 30 to 35 disclosed replacing the differential conductivity meter by conductivity measuring means for measuring both conductivities, which in the embodiment of Figure 1 were the conductivities at points 47 and 46. There were, moreover, alternative ways of reading the disclosure of D1 onto the claims of the patent. It was possible to consider cartridge 5 as the "first concentrate", and the line carrying the solution from vessel 21 to the dilution point 44 as the "dilution line". Since conductivity meter 49 on the main line 36 was disclosed in column 6, lines 47 to 55 to control pump 48, it would anticipate the claimed sensor "predisposed to emit a signal indicating a chemical-physical property of the liquid situated in the first injection circuit between the dilution point and the first injection point". The same argument held true, mutatis mutandis, regarding conductivity meter 38 on the main line 36 which controlled pump 40 (column 6, lines 56 to 59).

Document D2 disclosed in column 4, lines 41 to 46 that instead of separate dosage pumps and separate sensors as shown in the figures, a central dosage pump and a central sensor may be provided, allowing the sequential passage of the concentrates into the container. Therefore D2 disclosed the arrangements sketched in the statement of grounds of appeal in which containers A1 to A8 and water supply W were connected to multiport valve 1, followed downstream by a central dosage pump P and a central conductivity sensor S. In multiport valve 1, each of the concentrates was diluted so that valve 1 was a "dilution point" as claimed. According to column 4, lines 31 to 33, pump P should be controlled

by a control unit on the basis of information received from conductivity sensor S.

D3 disclosed an apparatus for preparing a liquid, wherein concentrate fluid line 24 and the portion of line 1 extending to the right of mixing point 23 in Figure 5 was the "main line" in claims 1 and 10. The claims of the patent did not define the notion of a "main line" in any more precise terms. It was therefore permissible to interpret the expression broadly, and consequently, D3 anticipated the claimed subject-matter. Similar conclusions were to be drawn for documents D4 to D6.

- Inventive step starting from D1

Document D1 had been cited in the patent as prior art having certain drawbacks (paragraphs [0003] and [0004]) which the invention set out to solve (paragraph [0007]). The patent indicated that in D1 a precise dosification of a second concentrate injected downstream into the main line was not possible when the amount of the desired second concentrate was relatively low. Since the claims of the granted patent referred to just one concentrate, the differentiating features over D1 did not solve the problem related to the second concentrate. According to established case law (following T 37/82; Case Law of the Boards of Appeal, 8th edition 2016, I.D.9.5), features which did not contribute to the solution of the problem set in the description were not to be considered when assessing inventive step.

Claim 1 differed from D1 in that the control unit is predisposed for controlling the first pump on the basis of the signal emitted by the first sensor. The

technical effect of controlling pump 22 on the basis of the signal emitted by differential conductivity meter 47/46 consisted in increasing the precision of dosification of individual concentrates in the injection liquid. Consequently, the objective technical problem was to obtain a dialysis liquid with a more precise composition in accordance with patient treatment needs as well as during an individual patient treatment. It was common general knowledge that concentrations in a liquid may best be adjusted by controlling a pump with a sensor placed immediately thereafter. This teaching was, moreover, apparent from document D10. Hence, the skilled person departing from D1, in combination with his common general knowledge or D10, would have arrived at the subject-matter of claims 1 and 10 without exercise of an inventive step.

Moreover, the subject-matter of claims 1 and 10 was rendered obvious from the dialysis liquid preparation apparatus from D1 in combination with the similarly structured apparatus from D7. In D7 (paragraph [0020]), pumps 16, 22 and 28 were disclosed to be controlled by conductivity sensors 9 and 19 placed downstream of the pumps. Hence, confronted with the problem of obtaining a dialysis liquid with a more precise composition, the skilled person would have been led to control pump 22 in D1 on the basis of the differential conductivity sensor 47/46.

- Inventive step starting from D7 or D3-D6

From document D7, an alternative starting point, it was known to control each one of pumps 16, 22 and 28 using a signal from a sensor. In order to improve the composition of the dialysis liquid, the skilled person would take into consideration the teaching of D1

concerning the determination of concentrations at dilution point 44 using a differential conductivity sensor (47/46). Hence, from the combination of D7 with D1 the skilled person would readily arrive at the subject-matter of claims 1 and 10.

Moreover, since it was known from documents D2 and D10 to control a pump with a sensor placed immediately thereafter, the skilled person would have readily considered controlling pump 28 of D7 with a sensor placed after dilution point 19.

The subject-matter of the apparatus and method of claims 1 and 10 did not differ over what was disclosed in any of documents D3 to D6, where a different terminology was used. The mere change in terminology did not provide a basis for acknowledging an inventive step.

VII. The arguments of the respondent that are relevant for the present decision are essentially those on which the reasons set out below are based.

Reasons for the Decision

1. The appeal is admissible.
2. *The invention*

The invention relates to an apparatus and a method for preparation of a medical liquid, such as a dialysis liquid which is made of water with several salts or concentrates added, such as NaCl, sodium bicarbonate, as well as Ca, Mg and K ions. The apparatus comprises a main preparation line (26) connected to a water inlet,

into which different concentrates are injected (at injection points 37, 29, 44). Into one of the injection circuits (first injection circuit 27) having a source (28) of concentrate, a dilution liquid is injected at a dilution point (33) by a dilution line (31). The first injection circuit (27) comprises a first injection pump (34) controlled by a control unit (22) as a function of a signal supplied by a conductivity sensor (30) located between the point of dilution (33) and the injection point on the main line (Figure 1). The first injection circuit comprises moreover a second injection pump (35) for circulation of liquids in the injection line and the dilution line.

The description of the patent explains that the apparatus and method of the invention allows the preparation of a dialysis liquid and/or a replacement liquid in a machine for hemodiafiltration or hemodialysis with a precise dosage of the concentrates (paragraphs [0002] and [0009]).

3. *Novelty over D1*

- 3.1 Document D1, which is cited in paragraphs [0003] and [0004] of the patent, discloses an apparatus for preparation of a medical liquid comprising a "main line" (tube 36 in Figures 1 and 3). A solution of different concentrates (from cartridges 27, 28, 29) is first prepared and stored in mixing vessel 21 (Figure 1) and then injected into main line 36 at point 52 (a "first injection point" as claimed) (Figure 3). The solution in vessel 21 (a "first concentrate" as claimed) flows in a "first injection circuit" which receives, at point 44, a conduit (45, 8) carrying another solution from cartridge 5 (which the parties considered to be a concentrated NaCl or

bicarbonate solution). At said point 44, the concentration of the solution from vessel 21 and the NaCl or bicarbonate solution from the conduit (45, 8) connected to powder cartridge 5 are mixed. It follows that in the mixed solution downstream of point 44 the concentration of ions of the solution from vessel 21 is reduced, so that "the first concentrate is diluted" as recited in claim 1. Thus, contrary to the opinion of the respondent, "the first injection circuit has a dilution point (44) situated between the inlet of the first concentrate (21) and the first injection point (52)". A "first pump" (22) and a "second pump" (48) circulate liquids in the "first injection circuit" and in the "dilution line". Upstream and downstream of the "dilution point" (44), at measuring points 46 and 47, respectively, the appropriate concentration of dissolved substances is measured by means of a differential conductivity meter (column 6, lines 42 to 47).

- 3.2 Undisputedly, D1 does not explicitly disclose any control of pump 22, particularly not on the basis of the differential conductivity meter 47/46. The Board does not accept the appellant's view that the skilled person would recognise an implicit disclosure of such a control. It is indeed conceivable that the differential conductivity meter 47/46 has a different purpose, such as supervising, for safety reasons, the conductivity of the concentrate from vessel 21 as measured by sensor 23 (column 6, lines 4 to 9) in order to avoid injecting salts in the wrong concentration into the main line. Even if differential conductivity meter 47/46 were replaced by conductivity measuring means for measuring both conductivities before and after dilution point 44, an alternative disclosed in column 3, lines 30 to 35,

D1 fails to disclose any control of pump 22 on the basis of such conductivity measuring means.

3.3 Hence, claim 1 differs from D1 in that "the control unit is predisposed for controlling the first pump on the basis of the signal emitted by the first sensor".

Moreover, in the example shown in Figures 1 to 3 of D1 in which the differential conductivity meter measures the *difference* in conductivity at measuring points 47 and 46, rather than each of the individual conductivities at these points, the sensor does not "emit a signal indicating a chemical-physical property of the liquid situated in the first injection circuit between the dilution point and the first injection point" as defined in claim 1.

3.4 As a consequence, D1 does not anticipate the measuring steps recited in independent claim 10 of measuring a value of a chemical-physical property of the diluted first concentrate which flows in the first injection circuit after the point of dilution and of controlling a first flow rate of a liquid flowing in the first injection circuit or in the dilution line on the basis of a value measured of a chemical-physical property.

3.5 The appellant also presented alternative ways of reading the disclosure of D1 onto the claims of the patent. It considered cartridge 5 as the "first concentrate", and the line carrying the solution from vessel 21 to the dilution point 44 as the "dilution line". Since conductivity meter 49 on the main line 36 was disclosed in column 6, lines 47 to 55 as controlling pump 48, it would anticipate the claimed sensor "predisposed to emit a signal indicating a chemical-physical property of the liquid situated in

the first injection circuit between the dilution point and the first injection point". The same argument held true, *mutatis mutandis*, regarding conductivity meter 38 on the main line 36 which controlled pump 40 (column 6, lines 56 to 59).

The Board does not, however, accept these arguments. After concentrate liquid is injected from the injection line into the main line 36 carrying an additional considerable volume of water from inlet 1, the concentration of the liquid is further diluted, so that the concentration determined by conductivity sensor 49 no longer corresponds to that of the liquid in the injection circuit between the dilution point and the first injection point. The same applies, *mutatis mutandis*, to conductivity sensor 38 on the main line 36 controlling pump 40.

3.6 Consequently, the Board concludes that the subject-matter of claims 1 and 10 is novel over D1 within the meaning of Article 54 EPC.

4. *Novelty over D2*

4.1 In Figures 1 and 2 of D2 (column 3, lines 53 to 61; column 4, lines 24 to 40), two alternative apparatuses for preparing a dialysis liquid are presented which comprise concentrate containers A1 to A8, each connected to a pump (P1 to P8) and a conductivity sensor (S1 to S8). Each pump is controlled by control unit 15 on the basis of information received from the corresponding conductivity sensor. The various concentrates sequentially pass multiport valve 1 and are mixed in containers 3 and 7, from where they are injected into injection point 17 on the main line (20,

41), as depicted in Figure 2 (column 4, lines 51 to 59; column 6, lines 4 to 34).

- 4.2 Apart from these detailed embodiments, D2 discloses in column 4, lines 41 to 46 that, instead of providing each concentrate container with a separate dosage pump and a separate sensor, all concentrate containers may be provided with a central dosage pump and a central sensor, allowing the sequential passage of the concentrates into the mixing containers. Nothing more is disclosed in D2 in this regard, and no drawing depicting this further alternative is shown.

Based on this disclosure, the appellant sketched two arrangements in which containers A1 to A8 and water supply W were connected to multiport valve 1, followed downstream by a central dosage pump P and a central conductivity sensor S. The appellant considered that multiport valve 1 was a "dilution point" as claimed.

- 4.3 The Board does not accept this argument. No mixing of concentrates, and hence no dilution, takes place at multiport valve 1 since the different concentrates pass it in sequence. As indicated above, each of the concentrates A1 to A8 are mixed in containers 3 and 7 downstream of multiport valve 1, where each concentrate is diluted. Thus, it is any of these mixing containers, rather than multiport valve 1, which should be considered as a "dilution point". Since central conductivity sensor S is placed upstream of said dilution point (3, 7) it does not measure the conductivity of the liquid in the injection circuit after the dilution point as required by claim 10, or between the dilution point and the injection point (17) as required by claim 1.

4.4 Consequently, the Board concludes that the subject-matter of claims 1 and 10 is novel over D2 within the meaning of Article 54 EPC.

5. *Novelty over D3 to D6*

5.1 Document D3 discloses in Figure 5 a system for preparing a dialysis fluid having a "main line" (explicitly identified as such on page 8, lines 2 to 4 as main or primary conduit 1) into which concentrates are injected at points 7 and 23 (page 8, lines 2 to 19). These concentrates are injected without receiving any "dilution liquid" for diluting the concentrates as claimed.

5.2 Apart from the fact that D3 explicitly designates conduit 1 as the main or primary conduit, the claimed expression "main line" in an apparatus for preparing dialysis fluids carries an established and clear technical meaning for the skilled person. It designates the principal conduit which receives the main water flow into which concentrate electrolyte solutions are added.

Hence, the skilled person would not consider that the "main line" as defined in claims 1 and 10 can be fairly equated with concentrate fluid line 24 and the portion of line 1 extending to the right of mixing point 23 in Figure 5 of D3, as posited by the appellant.

5.3 Hence, in D3 the concentrates are injected into the main line (1) without receiving any "dilution liquid" for diluting the concentrates as claimed. That is, document D3 lacks the claimed feature of a dilution line which carries a dilution liquid for diluting the concentrate before it is injected into the main line.

5.4 Regarding the aforementioned features, the structure of the apparatus of document D4 is entirely analogous to that of D3. In fact, D4 discloses in Figure 1 a system for preparing a dialysis fluid having a main line ('canalisation principale' 11) into which concentrates are injected at points 24 and 23 (column 3, lines 21 to 42). These concentrates are injected without receiving any dilution liquid for diluting the concentrates as claimed.

The description of documents D5 and D6 is an English translation of the description of D4, and the drawings of D5 and D6 are the same as in D4.

5.5 Therefore, documents D4 to D6 lack the claimed feature of a dilution line which carries a dilution liquid for diluting the concentrate before it is injected into the main line.

5.6 It follows that the subject-matter of claims 1 and 10 is novel over D3 to D6 within the meaning of Article 54 EPC.

6. *Inventive step starting from D1*

6.1 According to a first line of argument by the appellant, D1 should be taken to represent the closest prior art. According to the foregoing analysis of D1 (particularly point 3.3), claim 1 differs from D1 in that "the control unit is predisposed for controlling the first pump on the basis of the signal emitted by the first sensor".

6.2 According to the appellant, the technical effect of adapting D1 by controlling pump 22 on the basis of the

signal emitted by differential conductivity meter 47/46 in D1 consisted in increasing the precision of dosification of individual concentrates in the injection liquid. It was consequently posited that the objective technical problem was to obtain a dialysis liquid with a more precise composition in accordance with patient treatment needs as well as during an individual patient treatment.

6.3 The Board is not, however, convinced that this use of the differential conductivity meter actually achieves the posited technical effect of increasing the precision of dosification of individual concentrates in the injection liquid, at least not in a meaningful way. The apparatus of D1 already comprises a concentration measuring device (23) for setting the desired concentration of the salts from cartridges 27, 28 and 29 in the concentrate in mixing vessel 21 (column 5, line 59 to column 6, line 9). As indicated in column 3, lines 35 to 41, a differential conductivity meter, such as meter 47/46 in Figures 1 to 3, will be effective in determining the concentration of salts in the liquid from vessel 21 only when the latter slightly changes the conductivity of the liquid after dilution point 44. That is, should the concentration of the latter become similar to that of vessel 21, differential conductivity meter 47/46 will no longer be effective in precisely determining the concentration of the concentrate from vessel 21. The differential conductivity meter would not be effective either in identifying the origin of sudden variations of conductivities on both branches.

6.4 The appellant argued that it was common general knowledge that concentrations in a liquid may best be adjusted by controlling a pump with a sensor placed immediately thereafter. Moreover, this teaching was

apparent from document D10 too, in relation to a dialysis system (page 8, third paragraph; Figure 1).

While in general this assertion may be correct, it is still a different matter whether the skilled person would have solved the posed problem in the aforementioned context of D1. As explained under point 6.3 above, the Board is not convinced that controlling pump 22 in D1 on the basis of the signal emitted by differential conductivity meter 47/46 would necessarily have the technical effect of increasing the precision of dosification of individual concentrates in the injection liquid.

- 6.5 Consequently, the adaptation of the apparatus of D1 suggested by the appellant would not solve the objective technical problem of obtaining a more precise composition of the dialysis liquid (paragraph [0009] of the patent).

Therefore, the skilled person, using either his common general knowledge or D10, would not have readily adapted the apparatus of D1 as suggested by the appellant.

- 6.6 The appellant argued, moreover, that document D1 had been cited in the patent as prior art having certain drawbacks (paragraphs [0003] and [0004]) which the invention set out to solve (paragraph [0007]). The patent indicated that in D1 a precise dosification of a second concentrate injected downstream into the main line was not possible when the amount of the desired second concentrate was relatively low. Since the claims of the granted patent referred to just one concentrate, the differentiating features over D1 did not solve the problem related to the second concentrate. According to

established case law (following T 37/82; Case Law of the Boards of Appeal, 8th edition 2016, I.D.9.5), features which did not contribute to the solution of the problem set in the description were not to be considered when assessing inventive step.

In the present case, the Board considers that the differentiating features are indeed conducive to solving the problem indicated in the introduction of the description of the patent, even if they do so in combination with other features. As shown in the example of Figure 1 of the patent, in combination with the differentiating features of controlling the first injection pump (34) on the basis of a first sensor (30), a further concentrate (46) is injected into the main line (26) downstream from the injection point (29) of the first injection circuit (27, 28), whose conductivity is (precisely) controlled by a conductivity sensor (48) according to paragraph [0082].

6.7 Document D7 does not provide a solution to the posed problem either. The overall structure of the apparatus of D7 is similar to that of D1, particularly with regard to the mixing of a NaCl concentrate (15) and an electrolyte solution from bag 26 at a "dilution point" which is then injected at "injection point" 7 into the main duct (5). Conductivity sensors (9 and 19) placed on the main duct (5) control pumps 16 and 22 (paragraph [0020]). Contrary to the appellant's view, there is no disclosure in D7 that pump 28 (which is analogous to pump 22 in D1), which pumps the electrolyte solution into the "dilution point", should be controlled by any conductivity sensor (note, in particular, the last sentence of paragraph [0020]). Hence, D7 lacks precisely the claimed features which are missing in D1 too. Moreover, D7 lacks any disclosure of a sensor

measuring the conductivity of the liquid situated between the dilution point and the injection point.

As the differentiating features over D1 are absent from D7 too, the combination of D1 with D7 does not allow the skilled person to get any closer to the claimed subject-matter.

6.8 The aforementioned reasoning applies to method claim 10, *mutatis mutandis*.

6.9 The Board therefore concludes that the subject-matter of claim 1 and 10 is not obvious within the meaning of Article 56 EPC when departing from D1 as closest prior art.

7. *Inventive step starting from D7 or D3-D6*

7.1 In a further line of argument, the appellant started from D7 as closest prior art. However, D7 not only lacks the features which are also missing in D1, but it does not even comprise a sensor on the "dilution line" (such as meter 47/46 in D1). Hence, the combination of D7 and D1 does not render the claimed subject-matter obvious for analogous reasons to those presented under point 6.7 above.

7.2 The appellant argued, moreover, that it was known from documents D2 and D10 to control a pump with a sensor placed immediately after it. This knowledge by itself does not prompt the skilled person to control specifically pump 28 of D7 with a sensor placed downstream, particularly on the injection circuit after the dilution point (19).

Therefore, the combination of D7 with D2 or D10 does not render the claimed subject-matter obvious.

- 7.3 In yet a further line of argument, the appellant started from any one of documents D3 to D6. It argued that the subject-matter of the apparatus and method of claims 1 and 10 did not differ over what was disclosed in any of documents D3 to D6, where a different terminology was used. The mere change in terminology did not provide a basis for acknowledging an inventive step.

As indicated above (under point 5.2), the Board considers that in the technical field concerned with the preparation of dialysis liquids, the claimed terminology of a "main line" carries a specific technical meaning which cannot be ignored. Consequently, documents D3 to D6 lack the claimed feature of a dilution line which carries a dilution liquid for diluting the concentrate before it is injected into the main line.

Hence, any of documents D3 to D6 is further removed from the claimed subject-matter than D1.

- 7.4 Accordingly, the Board concludes that the subject-matter of claims 1 and 10 is not obvious when departing from any of D3 to D7 within the meaning of Article 56 EPC.
8. The Board comes to the conclusion that the objections raised do not prejudice the maintenance of the patent as granted.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



D. Hampe

E. Dufrasne

Decision electronically authenticated