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Datasheet for the decision of 17 October 2012

Case Number: T 1476/11 - 3.4.02

Application Number: 00955617.6

Publication Number: 1210579

IPC: G01N21/01

Language of the proceedings: EN

Title of invention:

LIQUID PHOTOMETER USING SURFACE TENSION TO CONTAIN SAMPLE

Patentee:

NanoDrop Technologies LLC

Opponent:

Kilger, Christian

Headword:

Relevant legal provisions:

EPC Art. 123, 56

Keyword:

Independent Claims 1 and 4 as granted - Added Subject matter (no) - Inventive Step (yes)

Decisions cited:

Catchword:



Beschwerdekammern Boards of Appeal Chambres de recours

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Case Number: T 1476/11 - 3.4.02

D E C I S I O N of the Technical Board of Appeal 3.4.02 of 17 October 2012

Appellant I: NanoDrop Technologies LLC

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Decision under appeal: Interlocutory decision of the Opposition

Division of the European Patent Office posted 17 May 2011 concerning maintenance of the European

Patent No. 1210579 in amended form.

Composition of the Board:

Chairman: A. Klein
Members: M. Rayner

B. Müller

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Summary of Facts and Submissions

- I. Both the patent proprietor and the opponent appealed against the interim decision of the opposition division that European patent 1 210 579 in amended form according to auxiliary request number five of the patent proprietor meets the requirement of the Convention. Reasons for non-compliance of the higher order requests of the patent proprietor with the Convention, the main request being for rejection of the opposition and maintenance of the patent as granted, were also given in the reasons for the decision. The patent relates to a method of performing a photometric or spectrophotometric measurement on a liquid sample and apparatus for performing optical measurements.
- II. Documents (overlapping authorship being shown in bold type) including the following were referred to in the opposition and/or appeal proceedings:-

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D2 DD-107 783 (Horn, Thielmann, Volke, Wölfel)
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- D3 EP-A-18435
- D4 JP-A56-006140 (and English translation)
- D5 US-A-4 268 881
- D6 DE-A 31 07 964
- D8 DE-A-38 12 978
- D9 EP-B-605 598
- D14 EP-A-286 419.
- D15 Acta biol. med. germ. Band 36, Seite 1-6 (1977) (Hoffman-Blume, Horn, Thielmann)

Moreover, the opponent referred to Analysis Charts as follows:-

D16 Left Column, Claim 30 as originally filed Right Column, MR and all Pending Requests

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- D17 Left Column, Claim 30 as originally filed Right Column, All Pending Requests
- D18 Left Column, D2
 Right Column, MR-Claim 1.

III. Decision under Appeal

The reasoning of the opposition division concerning the patent as granted can be summarised as follows.

Added Subject Matter - Liquid Sample

The opponent had objected to the term "microdrop liquid sample" used in original claim 30 being amended to the term "liquid sample" in claim 1 as granted such that the subject-matter of claim 1 extended beyond the content of the application as filed. The opponent pointed to the sentence bridging pages 3 and 4 of the application as published according to which "It is the object of the instant invention to make use of the surface tension of a microliter or submicroliter sample of liquid to provide sufficient means to confine it within the analysis region of an optical analysis instrument and to carry out the requisite measurement."

The opposition division was not persuaded by this objection because the application is directed to an apparatus and a method for performing photometric or spectrophotometric measurements on liquid droplets confined between two opposing surfaces by surface tension according to the passage cited. While this enables measurements of liquid droplets in the microliter or submicroliter range to be performed, from the teaching of the application as a whole, and in particular from the statement of the invention on page 4 of the application as filed, it is clear that the

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applicability of the apparatus and the method of the invention is not limited to microdrops as long as the requirement of the droplet being confined between the surfaces by surface tension is fulfilled.

The Opposition Division was therefore of the opinion that the subject-matter of claim 1 as granted does not extend beyond the content of the application as filed.

Patentability

Claim 1

The subject matter of method claim 1 is novel over document D2. The subject matter of claim 1 cannot, however, be considered to involve an inventive step over the disclosure of document D2 alone or in combination with that of document D3 or D6 as it was obvious to the skilled person to modify the teaching of document D2 to improve control over mixing of liquids.

Claim 4

Novelty of the subject matter of claim 4 is undisputed. Document D2 discloses an apparatus for performing optical measurements on microliter or sub-microliter liquid samples comprising means to perform an optical measurement of the properties of microliter or sub-microliter sample of liquid disposed between the surfaces features. Novel features relating to the arrangement of surface and swing arm mechanism for moving the surfaces relative to each other, together solve a first problem of providing an alternative arrangement for bringing two opposed surfaces in a compression position and a measurement position. Novel

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features relating to an optical fiber arrangement, together solve a second problem of providing an arrangement for illuminating the sample and for collecting light from the sample for measurement.

Document D9 discloses a method wherein the sample is located in a measuring chamber that is adjustable in shape such that the radiation path length across the measuring chamber may be controlled. Opposed elastically deformable windows are deformed by moving a movable part towards a stationary part of the windows such as to reduce the radiation path length between them. However, document D2 is concerned with a containerless apparatus in which a microliter liquid sample is held between two surfaces by surface tension. There is therefore no reason why the skilled person, starting from D2 and confronted with the first problem would even consider document D9 which discloses a device that is not containerless but requires a very specific sample chamber. Furthermore, document D9 does not even mention surface tension or microliter sample volumes. Document D8 describes a swing arm mechanism adapted to move a swing arm along a predetermined trajectory comprising two straight portions connected by a curved portion by means of an electromagnet. Such swing arm mechanisms are typically applied for withdrawing liquids from one vessel and transferring them to another vessel or for moving a stirrer from a sample vessel to a cleaning vessel. Document D8 does not mention photometric measurements of microliter liquid samples or the adjustment of optical path lengths through such samples. Thus, the skilled person would not even consider document D8 as this document relates to a completely different technical field and does not provide any teaching for solving the first stated problem. Furthermore, the movement required to

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achieve a compression position and a measurement position in the apparatus of document D2 is different from the movement performed by the swing arm of document D8. Documents D3 and D6 disclose arrangements comprising opposed plates the distance between which is varied by the use of electromagnets. As neither of these documents discloses a swing arm, they are no more relevant than document D8.

Document D9 teaches use of optical fibers for delivering light to the sample chamber and for transmitting light from the sample to a detector, but does not disclose optical fibers penetrating window surfaces of the chamber and ending flush therewith. Since the plates of document D2 are made of a transparent material, the skilled person would thus attach the optical fibers to the outside surface of the plates. This is also the case for document D4, where fibres are attached to the outer surfaces of transparent sheets. The skilled person does not receive any prompt from document D2 or D9 to make the fibers penetrate the surfaces and end flush therewith. Thus, even by applying the teaching of D9 to the apparatus of D2 the skilled person would still not arrive at the novel features relating to the optical fibre arrangement. Document D14 is directed to photometric analysis of a liquid drop held at the tip of two optical fibers (cf. Figure 1). While this document shows optical fibers that are in direct contact with the sample, the overall arrangement is very different from the opposing plates of document D2. Therefore the skilled person would not combine documents D2 and D14.

IV. Requests - Opponent

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The opponent requested that the decision under appeal be set aside and the patent refused in its entirety. Remittal of the case for discussion of added subject matter was requested if necessary. Oral proceedings were requested on an auxiliary basis.

V. Requests - Patent Proprietor

The patent proprietor requested that the decision of the opposition division pertaining to inventive step of claim 1 as granted be set aside. Should this request not be granted, maintenance in amended form on the basis of the claims according, sequentially, to the first to fifth auxiliary requests was requested. Oral proceedings were requested on an auxiliary basis.

VI. Consequent to the auxiliary requests of both parties, oral proceedings were appointed by the board.

In a communication attached to the summons, the board observed amongst other things that the parties should be aware that, during the oral proceedings, which are usually right at the end of inter partes proceedings, attempted movement outside of the cases presented ahead thereof may give rise to admissibility issues.

During the oral proceedings the opponent presented analysis charts D16 to D18.

The chairman informed the parties that since the submissions and arguments relating to document D16 and concerning amendments were based on claims only, and did not, for example, refer to close proximity as referred to in line 10 et seq. on page 7, they were prima facie not relevant and thus not admitted. The chairman also asked the opponent to confirm his request

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for introduction of document D15 into the proceedings as this document could be taken to show that measurement was made in a compressed position. In reply, the opponent maintained the request for introduction of document D15, to which the patent proprietor had no objection.

VII. Case of the Opponent

The reasoning of the opponent concerning the main request can be summarised as follows.

Amendments

(i) Document D16

Claim 30 as originally filed recited "moving the surfaces towards each other a preselected **distance**", whereas the requests of the patent proprietor recite "moving the surfaces towards each other to a predetermined compression **position**".

The amended wording of the claims was therefore not present in claim 30 as filed. The subject matter concerned has been discussed in the proceedings in the context of inventive step, but should be discussed in the context of subject matter extending beyond the content of the application as filed. It is for this purpose that remittal of the case was requested if necessary.

(ii) Document D17

This document illustrates that claim 30 as originally filed concerns a differential absorbance measurement as illustrated with reference to page 10, second paragraph

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and figure 7. However, granted claim 1 requires not a differential path length but a known path length. The subject matter claimed therefore extends beyond the content of the application as filed.

(iii) Liquid Sample

Claim 30 as originally filed referred to a method of performing a photometric or spectrophotometric measurement on a microdrop liquid sample. Claim 14 as originally filed refers to microliter or sub-microliter samples. The word microdrop has been omitted from claim 1 as granted. There are references to 2µl or less, for example in the second paragraph on page 1. However, there is no instance of a drop over 2µl in the application as filed. A generalisation to a sample therefore extends beyond the content of the application as filed, which contrary to the view of the opposition division is not mitigated by the statement of invention, also not referring to a larger sample.

Patentability

Claim 1

Document D15 illustrates the understanding of a skilled person at the time the device according to document D2 was made. In particular, the light path is between 0.5 and 2.0 mm. Two plates are held at a defined distance by small glass disks. An assumption of the patent proprietor that document D2 discloses at best a semi-quantitative measurement is therefore wrong. Document D2 discloses moving towards a predetermined compression position in view of at least the block/stopper embodiment disclosed.

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The opponent agreed that document D5 showed measurement in a compressed position (cf. e.g. second paragraph of section 1.3.2 of letter dated 27 September 2011).

Document D6, however, concerns a spacing frame and shows that measurement when plates are moved apart was also known. Any technical effect relating to the difference over document D2 concerning spacing to a known separation is therefore disclosed. The subject matter of claim 1 is therefore obvious in the light of documents D2 and D6 or similarly D3.

Moreover, no technical problem is solved by measurement in the spaced apart position as compared with the teaching of document D2.

With reference to document D18, even if document D2 is primarily focused on mixing two fluids and then measuring the absorption, when no mixing is desired, then the question must be asked, what person skilled in the art would honestly contemplate placing the sample on two plates? If the sample is placed on two plates as also contemplated in claim 1, what problem does that solve?

Claim 4

Essentially, the features of the claim comprise a swing arm and a solenoid with a plunger. These are means for moving to opposed surfaces relatively to each other that are well known to the skilled person and a standard solution for that problem. This can be derived from documents D9, D6, D8 and D3. The opposition division stated that the skilled person would not consider these documents, as they allegedly belong to remote technical fields. However, it is established

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case law that for the solution of any general technical problem, prior art in neighbouring fields and in non-specific general fields has also to be considered when assessing inventive step. Hence, the skilled person would consider the documents of prior art cited above, when confronted with the general technical problem of moving two opposed surfaces. When considering these documents the fixation of one surface, the movement using a swing arm, and the use of electromagnets is obvious. Moreover, as this solution is a standard solution for the problem it is also obvious in view of common general knowledge.

Use of optical fibres for connecting the sample with the light source and the detector is obvious in view of documents D9 and D14, as well as in view of common general knowledge of the skilled person. The use of optical fibers for transporting light from a source or to a detector was a common way of handling the problem. This is exemplified in document D9 where it is stated that fibres may be used to connect measuring chamber and analyzer. Furthermore document D4 discloses that optical fibers are commonly used. The penetration of and the ending flush with the surface is also obvious, as the option of bringing the liquid sample in direct contact with the light transporting optical fibre is known from document D14. The view of the opposition division that document D14 would not be considered by the skilled person because the overall arrangement of the apparatus is different is not correct. The question is not whether document D14 discloses an apparatus according to that claimed, but whether it gives the skilled person an incentive to bring sample and optical fibre in direct contact.

Hence, the subject-matter of claim 3 does not involve

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an inventive step in the sense of Art. 56 EPC.

VIII. Case of the Patent Proprietor

The reasoning of the patent proprietor concerning the main request can be summarised as follows.

Added Subject Matter

(i) Document D16

The submission of the opponent is a fresh objection submitted only during the oral proceedings and is therefore not to be admitted at such a late stage.

(ii) Document D17

Following on from the earlier figures, Figure 7 simply illustrates that samples can also be measured with a differential absorbance path. This can be better in some cases, but precision is still required.

(iii) Liquid Sample

The skilled person knows that pipetting a drop of 2µl is only an example. The statement of invention refers to the sample liquid. The functional feature in the claim places a limit on the sample without using the term microdrop to specify this. Therefore, the subject matter claimed does not extend beyond the content of the application as filed.

Patentability

Claim 1

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It was immediately and unambiguously clear to the skilled person reading document D2 at the priority date of the patent that a qualitative or at best semiquantitative technique is being described and that the length of the mixed droplet (plate separation) is not of particular significance. While the figures in document D2 are highly schematic, it is nevertheless apparent that, when the plates are in their uncompressed position, the fluid column does not extend across the full area of each cell, the droplet could be anywhere over the area of the cell. Since the arrangement of document D2 is wholly unsuited to the method, it cannot be seen why the skilled person would have looked at or sought to modify its teaching as would be necessary for any conclusion of lack of inventive step of the subject matter of claim 1. In the patent in dispute, optical path length in the apart state is critical in accurate measurement.

Moreover, document D6 shows an iron plate attracted and released by an electromagnet, which plate would block the measurement so that the teaching of the document would not have been combined with that of document D2.

Concerning document D18, whether or not the sample is split does not affect inventive step. Whether or not this is sensible is just a matter of choice.

Claim 4

The opposition division set out in some detail why the independent device claim was considered to involve an inventive step. The patent proprietor is in agreement with the conclusions reached. Moreover, as a general observation, the opponent's arguments appear to acknowledge that eight of the ten features identified

in the independent device claim are not found in document D2. In order to allege a lack of inventive step, therefore, the opponent requires an analysis that starts from the premise that the closest prior art shares only two of the ten features of the claim. This already lacks credibility. Then, to supply the remaining eight features, the opponent has had to rely upon four further documents, pulling them in from widely different fields, even from outside the field of containerless fluid measurements.

- IX. Independent claims 1 and 4 of the patent as granted (main request) are worded as follows.
 - "1. A method of performing a photometric or spectrophotometric measurement on a liquid sample (5) comprising:

placing the sample on one of two relatively moveable opposed surfaces or placing a part of the sample on each surface;

moving the surfaces towards each other to a predetermined compression position, to spread the sample and to wet the surfaces with the liquid sample; subsequently moving the surfaces apart from each other a preselected distance to a measurement position whereby the sample (5) is contained between the surfaces by surface tension and pulled into a measurement column having a desired optical path length; and

performing the photometric or spectrophotometric measurement through that column.

4. An apparatus for performing optical measurements on microliter or sub-microliter liquid samples comprising a frame, a fixed surface or anvil (7) mounted on the frame, a moveable surface (2) mounted in the frame in

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parallel opposition to the fixed anvil means (58) to move the movable surface 2 apart from the fixed anvil surface (7), and means (3, 6, 9, 74, 72) to perform an optical measurement of the properties of microliter or sub-microliter sample of liquid disposed between the surfaces (7, 2) employing at least one optical fiber (6, 11) to deliver light to the sample and one other optical fiber to transmit transmitted or excited energy to a detector;

characterised in that

at least two optical fibers (6, 11) penetrate at least one of the surfaces, each of the fibres finishing flush with its respective surface,

the at least two optical fibers are opposed and each surface is penetrated by at least one fiber, the moveable surface is mounted on a swing arm (56) pivotally related to the fixed surface (7), the moveable surface (2) and swing arm (56) are disposed to be manually pivoted to rest upon the tip of the plunger (67) of a solenoid (68) fixedly mounted to the fixed surface (7) and the other tip of the plunger is biased toward the moveable surface (2) so that the swing arm (56) can be manually depressed to compress the sample between the two surfaces, or the solenoid (62) can be energized to compress the sample, whereby the sample wets both surfaces (7, 2) but when the solenoid is not energized and no manual force is applied to the swing arm (156) the two surfaces are spaced a selected distance apart to provide a desired optical path through the sample for measurement."

For the reasons given in section 4.2.5 of the reasons below, it is not necessary to recite the wording of the independent claims of the auxiliary requests.

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X. The board gave its decision at the end of the oral proceedings

Reasons for the Decision

- 1. The appeals of the opponent and patent proprietor are admissible.
- 2. Admissibility of document D16

Document D16 and the arguments advanced in support of alleged added subject matter were advanced for the first time during the oral proceedings and refer to claim 30 only in connection with the term preselected distance. No consideration was given, for example, to close proximity making contact with the deposited droplet wetting the entire confining surface as referred to in line 10 et seq. on page 7. As Article 123 EPC refers to the content of the application as filed, not just to the claims, document D16 and the arguments associated therewith are accordingly prima facie not relevant and thus were not admitted into the procedure at the late stage presented. The parties cannot be surprised by this turn of events because they had been advised in the communication attached to the summons to oral proceedings that during the oral proceedings, which are usually right at the end of inter partes proceedings, attempted movement outside of the cases presented ahead thereof may give rise to admissibility issues. Since document D16 was not admitted, remitting the case for its discussion is not a viable or appropriate procedural route.

Main request

3. Added Subject Matter

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3.1 Document D17

The objection of the opponent bears on claim 30 and Figure 7 and associated description on page 10. In taking this approach, the description prior to page 10 has been overlooked. As the patent proprietor pointed out, Figure 7 simply illustrates that samples can also be measured with a differential absorbance path. This part of the description is after, for example, lines 9 to 14 on page 7, which recite

"The upper second surface is brought into the measurement position 18, Figure 3b and then into close proximity 20 to the lower surface 7, Figure 3c making contact with the deposited droplet wetting the entire confining surface before returning to the sample measurement position and drawing up the sample measurement column 30, Figure 3d shown in 25."

The board does not therefore see a reference to a differential absorbance measurement in claim 1 to be necessary in the context of avoiding subject matter extending beyond the content of the application as filed. Accordingly, the submission of the appellant did not persuade the board.

3.2 Liquid Sample

The functional feature in the claim places a limit on the sample without using the term microdrop to specify this in a way which tallies with the statement of invention in the documents as filed. While the opponent has pointed to numerous references involving microdrop or microlitre, the board, in agreement with the opposition division and patent proprietor, is satisfied - 17 - T 1476/11

that such references are not necessary in the claim to avoid subject matter extending beyond the content of the application as filed because the skilled person knows they are not necessary to meet the functional definition concerning analysis of liquids contained between two parallel surfaces spaced apart a known distance, wherein the sample liquid is confined by the surfaces and the surface tension of the liquid.

Accordingly, the submission of the appellant did not persuade the board.

- 4. Patentability
- 4.1 Claim 1
- 4.1.1 The description of the patent specification refers to the problem of establishing a collimated optical light path of known length through liquids confined by surface tension and addresses providing sufficient means to carry out the requisite measurements. During the opposition procedure document D2 has been taken as representing the closest prior art to the patent in dispute. The board has some reservations about this because of the age of the document (1974) and also because as the patent proprietor pointed out Figure 2 can be taken as indicating that the droplet could be anywhere over the area of the cell, which would hardly be compatible with the accuracy strived for in the patent in dispute.
- 4.1.2 Nevertheless, document D2 will be taken to represent the closest prior art document as this fits to the case of the opponent in a coherent way. The opponent argued that document D2 discloses that stops provide a predetermined compression position and also speaks of

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exactly reproducible sample thickness represented by reference 22 in Figure 2b. The patent proprietor did not disagree with this analysis. Likewise, the board does not disagree.

- 4.1.3 In considering what was disclosed in document D2, the parties accepted document D15 by overlapping authors as a further illustration of a structure of the type disclosed by document D2. The submissions made by the opponent in this respect reinforced his analysis of document D2 by reference in document D15 to two plates being held at a defined distance in compression position by small glass disks.
- 4.1.4 The opponent did not, however, show where there was a disclosure of the last five lines of the penultimate feature of claim 1, namely "moving the surfaces apart ... into a measurement column having a desired optical path length" (i.e. lines 1 to 3 on page 6 of the granted specification). Measurement in the apart state can therefore be considered novel. Since, moreover, the teachings of documents D2 and D15 run in the opposite direction to that claimed, i.e. measurement in a compressed state (documents D2 and D15) as opposed to a moved apart state, i.e. pulling the sample contained by surface tension between the surfaces to the desired optical path length, the subject matter of claim 1 is not obvious to the skilled person and thus can be considered to involve an inventive step having regard to documents D2 and D15.
- 4.1.5 The opponent went on to refer to document D6 and similarly document D3 concerning a spacing frame in order to show that measurement when moved apart was known. However document D6 is an arrangement involving mixing with an iron plate 310 attracted and released by

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an electromagnet and positioned over a sample plate, which iron plate would accordingly have precluded optical measurement through the column. For this reason, it would not have been obvious for the skilled person to have combined the teachings of documents D2 and D6 or D3. This argument of the opponent did not therefore persuade the board as to lack of inventive step of the subject matter of claim 1.

- 4.1.6 The opponent also argued that no technical problem was solved by subject matter of claim 1. Since the patent proprietor explained that optical path length in the apart state is critical in measurement, the opponent's argument did not persuade the board.
- 4.1.7 The submission of the opponent that no problem is solved by the claimed subject matter is not accepted by the board because accurate measurement in a sample column of desired optical path length meets the problem mentioned in section 4.1.1 above. Furthermore, the discussion of document D18 concerning mixing and splitting samples is not pertinent to this subject matter and is thus, as the patent proprietor submitted, not relevant to inventive step.
- 4.1.8 No other argument of the opponent, including those relating to other documents in the prior art, such as document D5 acknowledged by the opponent to show measurement in a compressed position, came closer to successfully challenging inventive step. The board therefore had no reason to consider the subject matter of claim 1 obvious and is therefore satisfied as to inventive step.
- 4.2 Claim 4

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4.2.1 The parties did not dispute novelty of the subject matter of claim 4. While, of the features recited in claim 4, document D2 only discloses

"An apparatus for performing optical measurements on microliter or sub-microliter liquid samples comprising means to perform an optical measurement of the properties of microliter or sub-microliter sample of liquid disposed between surfaces"

it can again be considered as representing the closest prior art for reasons analogous to those given in points 4.1.1 and 4.1.2. The problem addressed by the novel features is that given in section 4.1.1 above.

4.2.2 The question to be answered is thus whether the problem of establishing a collimated optical light path of known length through liquids confined by surface tension and providing sufficient means to carry out the requisite measurements is really solved in an obvious way having regard to general knowledge and the teachings of the various documents cited by the opponent. Submissions pertaining to applicability of prior art documents in neighbouring fields and general knowledge do not persuade the board, when, for example there are specific reasons why the teaching is incompatible with that of the patent. Thus, documents teaching use of a container would have been rejected by the skilled person, because the patent targets a sample bound by the surfaces and surface tension. For this reason, as the opposition division reasoned, document D9 using a sample chamber as container would have been rejected, as documents D3 and D6 would have been because of the effect of the iron plate on the optics as explained in section 4.1.5 above. Moreover, moving liquids and stirrers, where the device according to

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document D8 finds application is not a neighbouring field but has no real relation to optical measurement of surface tension confined liquids at all. In the case of document D4, optical fibres are secured to the outer surface of the plates, in the case of document D9 there is no penetration of the sample chamber and in the case of document D14 the board agrees with the opposition division that analysing a drop held at the tip of two optical fibres is very different from opposing plates so that the skilled person considering document D2 would not have taken any suggestion of contacting fibres to the liquid.

- 4.2.3 The board therefore reached the view that the various combinations of prior art documents submitted by the opponent would not have been obvious to the skilled person but arise from a kind of force fitting of the teachings concerned in the knowledge of the subject matter of claim 4. This approach uses hindsight and therefore does not convince the board as to lack of inventive step.
- 4.2.4 No other argument of the opponent, including those relating to other documents in the prior art came closer to successfully challenging inventive step. The board therefore had no reason to consider the subject matter of claim 4 obvious and is therefore satisfied as to inventive step.
- 4.2.5 In view of the foregoing, the case of the opponent failed whereas that of the patent proprietor according to the main request succeeded before the board. As the main request succeeded it was not necessary to consider the auxiliary requests of the patent proprietor.

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Order

For these reasons it is decided that:

- 1. The decision under appeal is set aside.
- 2. The patent is maintained unamended.

The Registrar:

The Chairman:



M. Kiehl A. Klein

Decision electronically authenticated