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**Datasheet for the decision
of 24 July 2014**

Case Number: T 0422/11 - 3.2.06

Application Number: 04730530.5

Publication Number: 1618240

IPC: D04H1/46

Language of the proceedings: EN

Title of invention:
PATTERNED SHEET PRODUCTS

Patent Proprietor:
Johnson and Johnson GmbH

Opponents:
Beiersdorf AG
SCA Hygiene Products AB
SCA TISSUE FRANCE
The Procter & Gamble Company
Paul Hartmann AG

Relevant legal provisions:
EPC Art. 83

Keyword:
Sufficiency of disclosure - (no)

Decisions cited:
T 0608/07, T 0593/09, T 1526/09, T 0228/10, T 0406/10,
T 1153/10, T 2542/10, T 2620/11



**Beschwerdekammern
Boards of Appeal
Chambres de recours**

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Case Number: T 0422/11 - 3.2.06

D E C I S I O N
of Technical Board of Appeal 3.2.06
of 24 July 2014

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Decision under appeal: **Decision of the Opposition Division of the
European Patent Office posted on 20 December
2010 revoking European patent No. 1618240
pursuant to Article 101(3)(b) EPC.**

Composition of the Board:

Chairman M. Harrison
Members: G. de Crignis
K. Garnett

Summary of Facts and Submissions

- I. European patent No. 1 618 240 was revoked by the opposition division by way of its decision posted on 20 December 2010.
- II. The opposition division held that the ground of opposition under Article 100(b) EPC was prejudicial to maintenance of the patent because the subject-matter of claim 1 according to the main request (claim 1 as granted) did not meet the requirement of Article 83 EPC, since the skilled person had to make arbitrary choices in terms of confined pressure when selecting a method for measuring the thickness of the raised and lowered regions, and that the skilled person was not in a position to determine in a reliably reproducible manner the bounds of the raised and lowered regions. The same applied to claim 1 of the auxiliary requests I to IX.
- III. The appellant (patent proprietor) filed an appeal against this decision. In the appellant's grounds of appeal it requested that the decision under appeal be set aside and the case be remitted to the opposition division for consideration of the remaining objections. Additionally, auxiliary requests I to XIV were submitted, on the basis of which maintenance of the patent was also requested as an auxiliary measure. Reference was made to the following documents:
- E1 US-A-4,127,637
E6 US-A-4,135,024.
- IV. In their replies to the grounds of appeal, the respondents (opponents OI to OV) referred additionally to:

E17 EP-B-0 681 621
E20 ASTM Standard D5729-97
E21 EDANA Standard 30.5-99
E23 EP-A-0 750 063
E26 EP-A-0 359 501
E33 EDANA Standard 30.4-89
E37 EP-A-1 032 366.

- V. With its communication annexed to a summons to oral proceedings, the Board indicated that its preliminary view concerning the main request was consistent with the conclusion reached by the opposition division. As regards the auxiliary requests, the Board noted that the appellant had provided no arguments or explanation supporting the filing of its auxiliary requests and that no reason was apparent as to why any of the auxiliary requests should result in a different conclusion being reached than applied to the main request.
- VI. With letter of 24 June 2014, the appellant informed the Board that it would neither be present nor represented at the oral proceedings. Additionally, the appellant filed photographs of two wall panels. In defence of its auxiliary requests, the appellant stated only that it preferred to maintain them.
- VII. Oral proceedings were held before the Board on 24 July 2014 in the absence of the appellant and also of respondent/opponent III, its intended absence having been notified to the Board by its letter of 23 June 2014.
- VIII. At the start of the oral proceedings the Chairman duly noted that the appellant had requested in writing that

the decision under appeal be set aside and the case be remitted to the opposition division to maintain the patent as granted, alternatively on the basis of the first to fourteenth auxiliary requests filed with the statement of the grounds of appeal dated 28 April 2011.

The respondents/opponents I, II, IV and V requested that the appeal be dismissed. The chairman noted that the respondent/opponent III had requested in writing that the appeal be dismissed.

IX. Claim 1 as granted (main request) reads:

"A porous or absorbent non-woven sheet obtained by carding, spunlaying, meltblowing, airlaying, wetlaying or a mixture thereof as the web forming procedure and by hydro-entanglement as the web bonding process comprising a substrate wherein a substantial portion of one or both surfaces of the sheet has a three-dimensional pattern embossed therein, said pattern comprising a series of raised and lowered regions which are located adjacent to one another, wherein the basis weight of the substrate is essentially the same over the whole surface and wherein the density of the raised regions is lower than the density of the lowered regions, characterized in that the density of the lowered regions is in the range from 100 to 180 kg/m³ and wherein the density of the raised regions is in the range from 50 to 100 kg/m³."

X. The arguments of the appellant were essentially the following:

Hydro-entanglement furnished a compacted, densified nonwoven web whereby the hydroentangled fibres stayed close to the surface of the web. The skilled person

would have known to employ a method for measuring the thickness that did not apply any pressure to the non-woven sheet, because this would have disturbed the raised and lowered portions, and was also aware that one such method for determination of the thickness was simply to cut a nonwoven fabric in suitable sections and measure the thickness using a simple ruler without applying any pressure. In the alternative, an enlarged digital picture or laser measurement to determine distances could be used. No undue burden was involved.

The patent in suit referred in its description to E1, which disclosed, as a technique for measuring the thickness of non-woven sheets having raised and lowered regions, the method of micrography whereby the contour of the non-woven sheets was not distorted by use of pressure (see E1, col. 6, l. 49 to 58). No explicit statement was needed in the description of the patent in suit that E1 was intended to be used for measuring the thickness of non-woven sheets.

Consistent with E1, E6 referred to the use of a photomicrograph, without applying any pressure, to determine the thickness of raised and lowered regions in a non-woven specimen (see E6, col. 9, l. 15 to 20).

Accordingly, the skilled person would have known to employ such a method and the skilled person did not have to make an arbitrary choice among different types of methods for measuring the thickness of a non-woven sheet having raised and lowered regions.

E1 formed part of the patent in suit. When entering the European phase, the applicant had to specify the application documents on which the European grant procedure was to be based (Rule 159(1)(b) EPC). Thus,

the application documents for the European grant procedure were those used for entry into the European phase. This understanding was confirmed by Rule 162(1) EPC which also referred to the application documents on which the European grant procedure was to be based. In the same way, Rule 164(1)(2) EPC referred to those documents used for entry into the European phase as application documents on which the European grant procedure was to be based. Accordingly, E1 had already been part of the application documents on which the entry into the European phase was based.

Concerning the distinction between raised and lowered regions, the skilled person was able to determine the bounds thereof. Paragraph [0052] of the patent in suit gave additional information in this respect. The photographs of wall panels supplied in its response of 24 June 2014, albeit that they did not represent specific embodiments of the invention, demonstrated how peaks and valleys could be identified.

According to current EPO case law, for an objection under Article 83 EPC to be valid in a case such as this it was necessary to show that the ambiguity deprived the person skilled in the art of the promise of the invention. Thus, it had to be shown that a skilled person using his common knowledge could not identify a technical measure to implement the invention. T0593/09, T2620/11, T2542/10, T0406/10, T1526/09, T1153/10, T0608/07 and T0228/10 stated that to substantiate a case of lack of sufficiency it was not enough to show that an ambiguity existed. The decision of the opposition division was therefore not in line with such recent decisions of the Boards of Appeal.

XI. The respondents (opponents) essentially argued:

The characterising feature solely consisted of the ranges for the density of the lowered and the raised regions. Accordingly, exactly these features had to be reliably identifiable in order to be able to carry out the invention.

No method was disclosed for determining, in a reliable and reproducible manner, the density of the different regions of such a nonwoven sheet, which, according to the description in the patent, could be some 0.1 to 2mm in thickness, with the depth of the raised or lowered regions being preferably in a range of 0.05 to 1mm.

It was not even possible to identify the portions which constituted the lowered and the raised regions. E17 for example disclosed that the upper surface of a hydro-entangled nonwoven sheet could not be unambiguously defined due to the varying heights of the various fibre loops forming the surface. Thus the determination of thickness without a specific method was simply arbitrary, depending on where the sheet was measured.

E37, which was also cited in the description, included a different test method for determining the density to that of E1. Micrography as suggested in E1 did not lead to unambiguous results as it required the cutting of the layer, a step which led to its deformation. In any event, the sheets in E1 included a permanent binder and thus did not represent a comparable sheet to that claimed.

E1 was only added to the description of the application when amending it so as to refer to the prior art. It was established case law that an invention may be deemed to be sufficiently disclosed only if such a

document was also mentioned in the application documents as filed (see T0611/89 and T0267/91). Rule 159(1) EPC required the applicant to specify the application documents on which the European grant procedure was to be based, but made a distinction between the application documents as originally filed and those as amended. Thus, "application documents on which the European grant procedure is to be based" was not synonymous with "application documents as originally filed".

Only one example of a method of manufacturing a sheet was given in paragraph [0208]. This example failed to elaborate on the type of fibres used, their lengths and denier, the relation in which they were mixed, the line speed, characteristics of the calendaring devices and the hydro-entangling devices or the energy of the water jets applied. No data for density were given either. Accordingly, this example could not establish an example for the claimed sheet.

The skilled person was aware of micrograph analysis procedures such as those disclosed in E1 but also of standardised procedures disclosed in E20 and E21 which involved the application of a pressure. The selection of a single one of these test procedures represented an arbitrary choice. The appellant had suggested that the skilled person would have avoided the use of procedures which apply pressure prior to determining the thickness of the raised and lowered regions and therefore would inevitably have chosen a micrograph analysis procedure for measuring the densities. However, no explanation was given of how the application of pressure was to be avoided in the use of a micrography procedure which typically involved (in the preparation of a sample) the use of a knife, by which pressure was unavoidably

applied to the nonwoven and by which the surface was disrupted. Moreover, no answer had been given to the argument that a micrograph analysis procedure was inappropriate for measuring the density of hydro-entangled nonwoven sheets since in the absence of a binder material the preparation of a sample for analysis would destroy the integrity of the structure. E1 was specifically concerned with nonwovens which had been provided with a stabilizing binder material.

It was not possible to determine the bounds between the raised and the lowered portions. It was necessary for such determination to know the reference point which, according to paragraph [0059], was "the average distance to the middle of the sheet". No middle of the sheet could be identified.

The feature concerning the densities of the regions was present in claim 1 of all auxiliary requests. The objections to the main request applied equally to the auxiliary requests. The appellant had supplied no defence of its auxiliary requests.

Reasons for the Decision

1. Article 100(b) EPC

- 1.1 The opposition division based its decision to revoke the patent upon the lack of a clear teaching of how to determine the claimed densities of the lowered and raised regions: the patent in suit did not disclose any method for measuring the thickness of these regions in a non-woven sheet.

- 1.2 Claim 1 refers to a non-woven sheet which has been obtained using hydro-entanglement as the web bonding process. In its characterizing portion it is specified "that the density of the lowered regions is in the range from 100 to 180 kg/m³ and wherein the density of the raised regions is in the range from 50 to 100 kg/m³". This feature is the single technical feature which distinguishes the claimed sheet from prior art sheets.
- 1.3 Hydro-entanglement was argued by the appellant to be a web bonding process which would furnish a compacted, densified nonwoven web. However, a compacted, densified nonwoven web would only be achieved by hydro-entanglement if the related conditions of manufacturing, such as for example the kind of fibres, the area weight, the amount of water jet pressure, the kind of nozzles, as well as the addition of agents for defined requirements and applications were met. Nowhere in the patent specification are such conditions specified, nor are they implicit. Claim 1 is not limited to a compacted densified nonwoven web; the claim covers any web, also loosely bonded nonwoven webs.
- 1.4 Further, it can be noted that the thickness of the non-woven sheet according to the description in the patent in suit should lie in the range of 0.2mm to 4mm (see e.g. paragraphs [0060] and [0061]), the more preferred range being about 1.1mm. The determination of the thickness - which forms the basis for the calculation of the density - of such thin nonwoven sheets is not trivial.
- 1.5 Additionally, the claimed raised and lowered regions are neither expressly nor implicitly limited to evenly

or regularly raised and lowered regions. The description - and claim 2 - refer to the lowered regions having less flat portions than non-flat portions and/or that none of the raised regions has any flat portions. Hence, the pattern comprising a series of regularly and irregularly raised and lowered regions adds a further burden to the determination of the thickness of the sheet since it does not allow the application of pressure. Indeed, all the parties agreed that by the application of pressure the three-dimensional structure of the nonwoven web would be altered and that accordingly the determination of the thickness would need to be performed without the application of pressure.

- 1.6 To make good its argument that there was sufficient disclosure with respect to the determination of the density of the regions the appellant relied on the reference in the description of the patent in suit to E1: in this document a technique is disclosed for calculating the density of high loft and densified areas of a non-woven sheet. According to the appellant, no explicit statement was needed that E1 was intended to be used for such a measurement. Additionally, the appellant suggested other methods could be used, such as simply cutting a nonwoven fabric into suitable sections and measuring their thickness using a ruler without applying any pressure; or, in the alternative, determining the thickness via an enlarged digital picture or laser measurement, such as for example referred to in E6, which disclosed the use of a photomicrograph. However, even if E1, E6 or any of the appellant's proposed methods were to be regarded as incorporated into the patent even at the date of filing, none of these methods is suitable in the case at issue, as explained *infra*.

- 1.7 E1 is referred to in paragraph [0008] of the patent in suit under the headline of "Background of the Invention". This passage reads as follows:
"US 4,127,637 discloses a method of forming a non-woven fibrous sheet suitable for use as a replacement for conventional textile fabrics. By this method the creping of a dry-formed, adhesively bonded non-woven web is controlled in a manner which produces soft sheets which can be provided with a number of different textures. Here, the embossing step is conducted prior to the creping step."
Hence, this passage does not refer to a method for determining the density range of raised and lowered regions but gives a summary of the method disclosed in E1 for manufacturing a dry-formed, embossed, adhesively bonded non-woven fibrous sheet, which method includes a particular sequence of steps, in particular the embossing step prior to the creping step.
- 1.8 E1 discloses with respect to a determination method for the density of a nonwoven sheet in col. 6, l. 46 to 65, a method for calculating the density of the high loft and densified areas. This method applies micrography in order to avoid distortion of the contour of the non-woven web by use of pressure. The method starts by providing a specimen of the embossed web, after which the specimen is then weighed and sectioned by cutting through high-loft and dense areas. The cut edge is positioned parallel to the plane of a camera lens and is photographed at a five times enlargement. The image is recorded on film. The resultant image is measured in the densified and loft areas using a millimeter scale and the recorded measurement corrected to actual size.

- 1.9 Hence, such a method is applicable when - as stated in E1 - a web is present which has been stabilized by the use of a binder, as in such a case the cut edge remains stable. As a consequence, such a method is not applicable to a web without such stabilization, as in the present case.
- 1.10 Therefore, irrespective on whether E1 was part of the application documents on which the entry into the European phase was based, it is not suitable for providing an appropriate determination method.
- 1.11 E37 - also cited under the heading "Background of the Invention" in paragraph [0005] of the patent in suit - discloses a personal cleansing wipe article comprising a single layer nonwoven substrate formed from hydroentangled fibres. It discloses on page 5, lines 168 to 171, that the caliper of the substrates has been measured by INDA Standard Test IST 120.1 (95). This standard test, however, includes the application of pressure and thus is not suitable for a nonwoven web according to the current invention.
- 1.12 Hence, the skilled person would not take into account the references in the description to either E1 or E37 when seeking to determine the thickness of the nonwoven sheet: on the one hand because none of these references is cited in the patent in suit for the purpose of applying or with the suggestion to apply the determination method disclosed therein; and on the other because the determination methods disclosed therein are anyway not suitable/applicable.
- 1.13 Standard methods are available, such as ASTM Standard D5729-97 (E20), EDANA Standard 30.5-99 (E21) or EDANA Standard 30.4-89 (E33), for measuring the thickness of

nonwoven webs in addition to the INDA Standard Test IST 120.1 (95) cited above. All these standard methods are only applicable to plain web structures as they involve the application of a certain amount of pressure. For this reason these methods would not have been considered by the skilled person - something which was acknowledged by the appellant.

1.14 Additionally, E6 was cited. It discloses a method of treating a low integrity dry-formed nonwoven web with a binder at the surface (see E6, claim 2 and col. 8, l. 23 - 48). Hence, as with E1, the surface of the sheet in E6 is stabilised. The web has a front surface having an undulating profile which includes high loft regions and densified regions. The density of the web in the high loft regions is specified as being less than about 0.1 g/cm^3 and the density in the densified region is specified as being greater than the density of the web in the high loft regions (col. 9, l. 3 - 9). The density of a region of the web is measured by determining the thickness via a photomicrograph of an edge region of the sample and determining the density on such basis (see col. 9, l. 12 - 20). As a consequence, this method confirms that such a method is only applicable when having a web which is stabilized by the use of a binder.

1.15 Consistently, E 17 (Figures 4, 5 and 8) and E 23 (Figures 4 and 5) show that for lofty nonwoven sheets, for which no binder has been used, no clearly defined surface point is available at which to make a measurement. Both documents disclose the determination of thickness under a defined pressure. According to E17, the thickness is determined under a pressure of 20g/m^2 (see page 5, l. 42); according to E23, thickness

is measured according to EDANA standard method 30-4-89 (E33), which refers to a pressure of 0.5 kPa.

1.16 Concerning the further alternative method suggested by the appellant, namely simply cutting a nonwoven fabric into suitable sections and measuring the thickness using an ordinary ruler without applying any pressure, such method is also not suitable for the thin sheets (cf. preferred thickness about 1.1 mm) in the case at issue. On the one hand, cutting the nonwoven fabric destroys the three-dimensional structure (as no stabilizing binder is applied), and thus prevents a correct determination of the thickness. On the other hand, using a ruler without applying any pressure inevitably leads to arbitrary results in view of the fibrous sheet having no exact boundaries (as also set out in point 1.14 above). Accordingly, the skilled person would not be able to apply such a method with any reasonable hope of meaningful results. The appellant's allegation that a skilled person would contemplate using a method of simply cutting out appropriate sections is not only entirely unsupported by any actual results or evidence of applying such a method to a thin sheet covered by claim 1, but also demonstrates a lack of appreciation of the technical nature of the products resulting from these methods in the field involved.

1.17 Concerning the alternative methods of determination of distances via an enlarged digital picture or laser measurement or any other methods to determine distances, the above identified constraints apply as well.

1.18 It may be added that there is no example in the patent in suit which would give an instruction on how to

determine the density of the raised and lowered regions, nor has any evidence been provided in the form of data concerning a claimed nonwoven sheet in response to the decision of the opposition division or to these objections raised by the respondents. The pictures included in the appellant's reply of 24 June 2014 relate to wall panels. It has not even been shown that these are produced so as to reflect the products covered by claim 1, i.e. nonwoven sheets. Thus, any relevance to the present case, as correctly argued by the respondents, is entirely lacking.

- 1.19 Accordingly, the skilled person would have had a variety of methods at hand for the determination of thickness and the calculation of density; however, none of these methods would be suitable to determine the density of raised and lowered regions in the claimed nonwoven sheet.
- 1.20 Accordingly, in addition to the fact that no method for the determination of the thickness is disclosed in the patent in suit, there is also no standard method available for such a determination. Also, no method has been convincingly suggested, let alone any evidence provided by the appellant that any such method is at all viable, in order to determine the density of the distinct regions. Hence, the skilled person would have had an undue burden to choose a method for this determination (or to know how to adapt any of the known procedures to render it applicable). The skilled person is thus not in a position to establish with any reasonable degree of reliability whether, when having produced a sheet having raised and lowered regions of some type, he has arrived at the invention defined by the claim. Therefore, the disclosure of the invention

in the patent in suit is insufficient within the meaning of Article 100(b) EPC.

For this reason alone the main request is therefore not allowable.

2. *Density of lowered and raised regions*

2.1 When considering the further objections related to the question as to whether the boundaries of the lowered and raised regions can be identified, and thus whether the skilled person can carry out the invention also in this respect - since this determination is necessary in order to know where to calculate the respective densities on the basis of a determined thickness of these particular regions - there is also insufficient information in the patent for the skilled person to carry out the invention.

2.1.1 Paragraph [0059] of the patent in suit indicates that the height of the raised regions and the depth of the lowered regions may be equal or different. "Height" of the raised regions is defined as referring to "the distance between the highest point of the raised region to the point of the surface that is the average distance of the middle of the sheet". In the same way the depth of the lowered region is defined as being "the distance between the lowest point of the lowered region to the point of the surface that is the average distance to the middle of the sheet". When further taking into account that neither the raised regions nor the lowered regions are defined as being raised or lowered in a regular manner (see also for example claim 2 of the patent in suit which sets out that "the lowered regions have less flat portions than non-flat portions and/or wherein none of the raised regions has

any flat portion"), the definition of a highest and a lowest point is purely arbitrary as there is no guidance on how to select the boundary of a raised or a lowered region in the z-direction and then how to identify a notional plane positioned at the average distance from the middle of the sheet. A number of arbitrary choices have to be made and accordingly, the skilled person would not be able to determine the boundaries of the lowered and raised regions.

2.2 Accordingly, and in contradiction to the appellant's argument that the objections to lack of sufficient disclosure relate simply to the breadth of the claim and ambiguity as to the claim boundaries, the Board concludes that this is not a case of ambiguity which deprives the person skilled in the art of the promise of the invention but instead a case where there is lack of any sufficient disclosure of a suitable method for a determination of density in this particular type of sheet combined with the lack of sufficient disclosure as to how to identify the boundaries of the raised and the lowered regions.

3. *Case law cited*

3.1 The appellant was of the view that according to current case law, for an objection under Article 83 EPC to be successful, it is necessary to show that the ambiguity deprives the person skilled in the art of the promise of the invention. Thus, it has to be shown that a skilled person using his common knowledge could not identify a technical measure to implement the invention. However, as has been shown in points 1 and 2 above there is no insufficiency arising out of an alleged ambiguity in the current case, but a lack of

sufficiency arising out of the absence of a method for determining the distinct densities which are claimed.

3.2 The appellant cited the cases T0593/09, T2620/11, T2542/10, T0406/10, T1526/09, T1153/10, T0608/07 and T0228/10 in support of its submission without, however, relating any of them to the facts of the present case. For the reasons which follow, the Board does not consider that any of them gives support to the appellant's case.

3.2.1 In T0608/07, the issue was whether the skilled person would readily understand the term "molecular weight" to mean weight average molecular weight (M_w). The understanding of a particular term is not the issue in the current proceedings. Density as well as thickness leave no doubt concerning their meaning. The case is not relevant to the current situation.

3.2.2 The catchword in T0593/09 states: *"What is decisive for establishing insufficiency within the meaning of Article 83 EPC is whether the parameter, in the specific case, is so ill-defined that the skilled person is not able, on the basis of the disclosure as a whole and using his common general knowledge, to identify (without undue burden) the technical measures (eg selection of suitable compounds) necessary to solve the problem underlying the patent at issue."* In the present case, it is not the parameter ("density") which is ill-defined - a skilled person knows what density is - it is the absence of any suitable method to identify and measure the parameter in the given structure (the hydroentangled non-woven web) and the further fact that no example is provided. Therefore the case is not relevant to the present one.

3.2.3 In T1526/09 the feature of "*la chargeabilité mesurée par tribogénération varie entre 0 et -10 nC/g*" was the relevant feature. The patent did not itself define the length and the width of the three-dimensional structure of the crystals, the determination conditions allegedly were not indicated sufficiently precisely and no values of the chargeability were given for the examples. Nevertheless, in the given context the Board considered it obvious that a relationship could be determined by using a microscope which delivered two-dimensional figures whereby the skilled person would have no difficulty to define the length and width of the crystals. In contrast to that finding, in the current case no easily verifiable data can be related to the claimed density ranges. It is not clear to the Board what relevance that case has to the present case.

3.2.4 In T0406/10 the objection concerned the feature "*dass die erste Lage und die zweite Lage auf gleiche Weise hergestellt sind*", the point being that the way in which the manufacturing had to be consistent was left undefined. However, no evidence was provided showing that this problem could not be overcome by the skilled person. Further, there were figures disclosed which showed schematically the manufacturing procedure and, accordingly, the objection of insufficiency was not substantiated. Unlike that decision, in the current case there are neither any figures nor any examples that go towards remedying the lack of sufficient disclosure in the description. In the present case the necessary details to arrive at a measurable product are entirely lacking, let alone the appropriate measurement methods.

3.2.5 In T2542/10, examples were given and the description provided sufficient guidance to select suitable thermo-

coagulated proteins. Accordingly, that case is also not relevant to the case at hand, where no such examples are disclosed in the specification and no data concerning any related sheet have been provided.

3.2.6 In T2620/11, the terms "glassy state" and "Maillard flavour" were objected to. However, in the patent specification there was provided a definition of "glassy state" and the term "Maillard flavour" had a clear meaning to the skilled person. Hence, the use of these terms rendered the scope of the claim broad but there was no lack of sufficient disclosure. In the current case, it is not the definition of a particular term or the breadth of the claim which are the issue, but the lack of a method for determining the claimed range for the densities. The case therefore is not relevant to the present one.

3.2.7 In T1153/10 a variety of sufficiency objections were raised. The only issues which in the appeal were still considered as being disputed and thus relevant concerned:

(i) item b), where a distance measurement was crucial, as not all distances in the indicated range of 10 - 50 cm produced the claimed result. The Board found that depending on the consistency of the sprayed aerosol the skilled person had to vary the distance required for performing an appropriate measurement. Such action fell within the capabilities of the skilled person and could be performed without undue burden. The skilled person would realise that it was crucial that within this range there would be little or no variation between the measured particle size distributions so that the results would be both reliable and reproducible.

(ii) item f), where the objection was that no guidance was given on whether the relevant parameter (particle distribution) was measured using a three- or a two-dimensional counting model.

The Board noted that the respondents had not provided any evidence - and even stated during the oral proceedings that they were not aware of any - showing that there would be a significant difference in the values depending on the three-dimensional or the two-dimensional counting model. Hence the objection could not hold.

Thus, the issue was the common general knowledge of the skilled person and the burden of proof. In the current case, the common general knowledge of the skilled person is clearly related to the well-known methods for determining thickness and to calculating the density based upon such determination. However, all these well-known methods are either not applicable or not suitable. The cited case is thus again irrelevant to the present one. In as far as the burden of proof is concerned this has certainly been fulfilled by the respondents. Nothing stated by the appellant has given the Board reason to find that the burden was not fulfilled.

- 3.2.8 In T0228/10 the point was made that when it comes to sufficiency of disclosure, the skilled person will use his ordinary knowledge and skill to try and overcome any lack of clarity in the claims. Once again, however, in the present case the known methods are neither applicable nor suitable, and the respondents have not explained how the skilled person could otherwise overcome the problem of measurement.

3.3 Accordingly, none of the cited decisions contradict the above finding on lack of sufficient disclosure of a suitable method for measuring the thickness.

4. *Auxiliary Requests*

As set out under point 1 above for the main request, the patent specification does not include sufficient information for a skilled person to enable the determination of the thickness of the sheet at the different regions and accordingly there is no meaningful possibility to calculate the claimed densities. Such lack of information is additionally increased by the lack of any clear distinction as to where the boundaries are to be drawn between a raised region and a lowered region.

The objection leading to the main request not being allowed applies equally to the auxiliary requests as well, since nothing in these requests alters the findings above. In this regard, the appellant chose to maintain all its auxiliary requests, but provided no reasons as to why these requests should suffer a different fate from that of the main request.

Accordingly, the Board finds that auxiliary requests I to XIV are not allowable for the same reasons as apply to the main request.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



M. H. A. Patin

M. Harrison

Decision electronically authenticated