Commissioner’s Decision #1353

Décision du Commissaire #1353

TOPICS: A11, O00, B00, B22

SUJETS: A11, O00, B00, B22

Application No: 2,313,707

Demande no: 2,313,707

IN THE CANADIAN PATENT OFFICE

DECISION OF THE COMMISSIONER OF PATENTS

Patent application number 2,313,707 having been rejected under subsection 30(3) of the *Patent Rules*, has consequently been reviewed in accordance with subsection 30(6) of the *Patent Rules* by the Patent Appeal Board and the Commissioner of Patents. The findings of the Board and the decision of the Commissioner are as follows:

Agent for the Applicant

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INTRODUCTION

[1] This recommendation deals with a review by the Commissioner of Patents of patent application no. 2,313,707, entitled AELASTICALLY STRETCHABLE COMPOSITE SHEET.@ The Applicant is UNI-CHARM CORPORATION and the inventors are Toshio Kobayashi, Satoru Tange and Koichi Yamaki.

[2] After amendments by the Applicant in response to the Examiner=s Final Action, this case was forwarded to the Patent Appeal Board (Athe Board@) on the basis that the Examiner considered the application to be non-compliant with the *Patent Act* and *Patent Rules* due to the following defects:

- claims 1-12 would have been obvious;
- claims 1 and 7 as amended contain unacceptable new matter; and
- claims 7 and 12 are indefinite.

[3] An issue of lack of support in relation to claims 4 and 10 was also raised by the Board at the review stage, which the Applicant addressed in their submissions of June 20, 2013.

[4] Based on the analysis that follows, the Board recommends that the application be amended as proposed by the Applicant in their submissions of June 20, 2013 and thereafter allowed.

BACKGROUND

[5] The application that is the subject of the present review relates to an elastically stretchable composite sheet and method of forming such a sheet, particularly one formed of an elastic sheet and a sheet-like fibrous assembly. Such composite sheets are useful for applications such as the backsheets of disposable diapers, in which a liquid-impervious elastic sheet may be bonded to an elastically stretchable non-woven fabric. In this way the rubber-like surface of the elastic sheet is provided with a layer of more comfortable cloth-like material.

[6] In the present case the applicant seeks to improve a traditional composite sheet by using features such as long continuous fibers extending across the fibrous assembly, which, according to the Applicant, avoids prior art problems of shorter fibers becoming disentangled from one another and creating an undesirable fluffy surface. Such a structure also avoids the necessity to make the bond regions between the layers more dense. The increased bonding site density was necessary with prior art shorter fibers in order to prevent the formation of a fluffy surface due to fiber disentanglement, which unfortunately created additional problems of reduced stretchability.

PROSECUTION HISTORY

[7] The present application was filed on July 11, 2000 on the basis of two earlier Japanese patent applications from which the Applicant claims priority.

[8] At the time of the Final Action dated November 29, 2010, the claims on file were considered defective for having been obvious only. As a result of the Applicant=s amendments in response to the Final Action, the Examiner identified additional defects in relation to new matter and indefiniteness in a Summary of Reasons (SOR) submitted to the Board and forwarded to the Applicant on February 20, 2012.

[9] The Applicant declined the opportunity for an oral hearing with the Board but did provide written submissions addressing the outstanding defects, as well as an issue of support in relation to claims 4 and 10, an issue identified by the Board during the review process and communicated to the Applicant on April 22, 2013.

[10] This recommendation is therefore based on the written record up to and including the Applicant=s written submissions of June 20, 2013.

ISSUES

[11] In view of the above, there are four issues to be addressed, one of which is the possible addition of unacceptable new matter to the claims. Since the decision as to the acceptability of the new matter affects the scope of the claims to be assessed, the Board will address the new matter issue first. The issues are therefore addressed as follows:

1. Do amended claims 1 and 7 include unacceptable new matter?
2. Would claims 1-12 have been obvious in view of the applied

prior art documents?

3. Are claims 7 and 12 indefinite?

4. Do claims 4 and 10 lack support in the description?

ISSUE #1: DO CLAIMS 1 AND 7 CONTAIN UNACCEPTABLE NEW MATTER?

Legal Principles

[12] Section 38.2 of the Patent Act sets out the conditions under which amendments may be made to the specification and drawings of a patent.

> **Amendments to specifications and drawings**
> **38.2** (1) Subject to subsections (2) and (3) and the regulations, the specification and any drawings furnished as part of an application for a patent in Canada may be amended before the patent is issued.
>
> **Restriction on amendments to specifications**
> (2) The specification may not be amended to describe matter not reasonably to be inferred from the specification or drawings as originally filed, except in so far as it is admitted in the specification that the matter is prior art with respect to the application.
>
> **Restriction on amendments to drawings**
> (3) Drawings may not be amended to add matter not reasonably to be inferred from the specification or drawings as originally filed, except in so far as it is admitted in the specification that the matter is prior art with respect to the application.

[13] We are unaware of any guidance from the Canadian courts which speak to the issue of new matter in relation to a patent

application or patent. The issue has recently come up in *Re Application No. 2,159,968* (2009), C.D. No. 1293 (P.A.B. and Commissioner of Patents). In that decision reference was made to a previous decision (*Re Application No. 315,073* (1981), C.D. No. 904 (P.A.B. and Commissioner of Patents)), where the conditions for an assessment under former Rule 52 (now s. 38.2 of the Act) were described as follows:

> The rule poses the following question: under what conditions should the reasonable inference be made and by whom shall it be made? The clear answer to this question is: the man skilled in the art at the time the application was filed.

[14] Since the protection afforded by a patent begins from the filing date, we view this as an appropriate date from which to assess the content of the application, and viewing the disclosed subject matter from the point of view of the person skilled in the art is consistent with the well known point of view from which a patent is to be interpreted. We therefore apply the above assessment in our analysis.

[15] The section of the Act quoted above at para. [12] requires that any amendments are Areasonably to be inferred@ from the originally filed specification or drawings. Since inference is permissible, the skilled person need not find an explicit reference to the additional subject matter.

[16] Before assessing new matter, because it must be done from the point of view of the person skilled in the art, who necessarily possesses the common general knowledge of the relevant art, we

will first establish who that person is and what common general knowledge they would have possessed, based on the record before us.

The Person Skilled in the Art and the Relevant Common General Knowledge

[17] In the Final Action the Examiner described the skilled person as Aa technician skilled in the art of elastic multi-layered composites@. The Applicant has not taken issue with this characterization and so we adopt it for the purposes of this recommendation.

[18] The Examiner has also set out in the Final Action some points of common general knowledge which the Applicant has not contested, namely knowledge of:

- the physical properties including yield behaviour of inelastic polymeric fibers and elastic polymeric sheets;
- laminating/bonding methods; and
- standard moisture permeability and water resistance test methods.

[19] To this list may be added the common general knowledge presented in the present application and outlined by the Board in its letter of June 20, 2013, with which the Applicant has also not taken issue:

- bonding elastically stretchable non-woven fabrics to elastically stretchable sheets made of plastic elastomer

or the like (which gives a cloth-like rather than rubber-like touch);

- the use of staple fibers of about 50 mm in length;
- the problem that fibers become disentangled as a sheet is repeatedly stretched leading to the composite sheet becoming fluffy; and
- the alleviation of the above problem if bond regions are made dense, which then however reduces elastic stretchability.

[20] A further point of common general knowledge is that expressed by the Applicant in the submissions of June 20, 2013. The Applicant clarified that it was well known in the art to form Agathers@ (i.e. undulating or wave-like formations) in composite sheets. This point is consistent with the disclosures of the prior art documents cited by the Examiner and the background discussions in each of them. We therefore take it to have been part of the common general knowledge. In the submissions of June 20, 2013, the Applicant outlined the key features of creating such gathers in relation to the reference to Boich et al. (Canadian Patent no. 2,150,366, referred to as D1) cited by the Examiner under obviousness:

(1) the fibers in the inelastic fiber layer 10 are under tensile stress sufficient to result in inelastic strain namely strain that is not recovered when the tensile stress is released, and therefore results in permanent stretching or deformation; and

(2) the spacing of connecting points 14 determines the shape and size of undulations or gathers that extend transversely to the direction of stretching. In D1 Figure 3 the equal spacing between connecting points

14 results in equal sized undulations or gathers. If connecting points 14 were spaced randomly, even undulations would not form but rather the fiber layer 10 (after inelastic stretching of the fibers) would have a

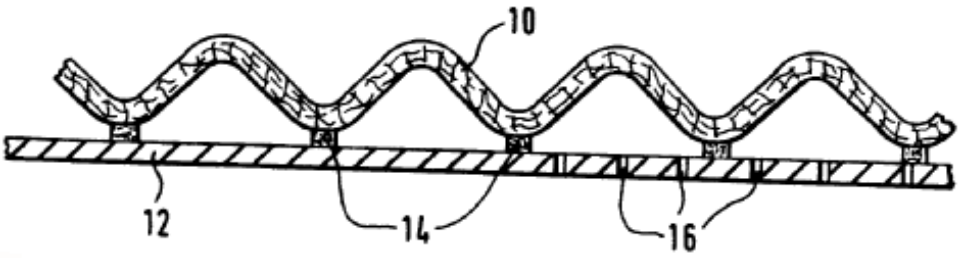


Fig. 3

Afluffed@ upper surface with random points of indentation at the connecting points 14 and random upwardly stretched loose peaks between the points of indentation.

[21] Figure 3 of the Boich et al. document, shown below, illustrates the gathers which are formed during processes such as those disclosed therein.

[22] With this knowledge in mind we proceed to look at the amendments to claims 1 and 7 to determine if they constitute unacceptable new matter.

Analysis

[23] Claim 1 is reproduced below with emphasis on the disputed new matter portion of the amended claim. Claim 7, which is a method of producing the composite sheet of claim 1 contains a very similar provision.

> 1. An elastically stretchable composite sheet comprising:
> an elastic sheet having a stretchability in longitudinal and transverse directions; and
> a fibrous assembly having an inelastic extensibility in said longitudinal and transverse direction bonded to at least one surface of said elastic sheet,
> wherein:
> said elastic sheet and said fibrous assembly have equal dimensions in two directions orthogonal to each other, before and after a step of stretching wherein the fibrous assembly is inelastically stretched;
> component fibers of said fibrous assembly extend in said longitudinal direction irregularly curving with respect to said longitudinal direction;
> said elastic sheet and said fibrous assembly are bonded together at bond regions arranged intermittently in said longitudinal and transverse directions;
> said component fibers of said fibrous assembly are continuous fibers which are long fibers continuously extending and describing loops in a bond-free region between said bond region defined between each pair of adjacent bond regions in which said long fibers are bonded to said elastic sheet;

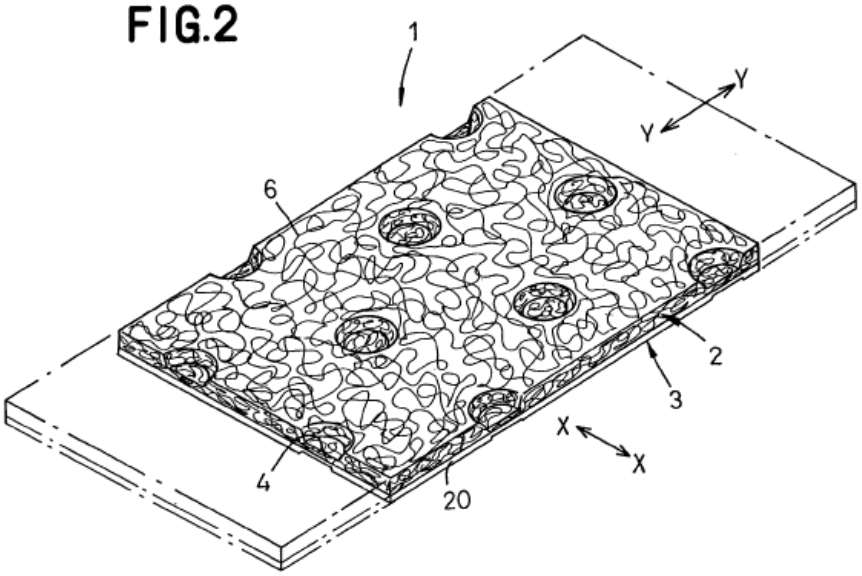
> said component fibers of the fibrous assembly being disentangled and disbonded to each other and from the elastic sheet in said bond-free region between said bond regions, during the step of stretching the fibrous assembly and reducing the diameter of the component fibers after the step of bonding the fibrous assembly to the elastic sheet at said bond regions;
>
> said elastic sheet is made of elastically stretchable film made from block copolymerized polyester comprising hard and soft ingredients; and presents a moisture-permeability of at least 1000 $g/m^2/24$ hrs. as measured according to the prescription of JIS Z 0208 and a water pressure resistance of at least 1 m as measured according to the prescription of JIS L 1092; and
>
> said elastic sheet is used for liquid-impervious backsheets of disposable body fluid absorbent articles.

[24] The particular passages were added to the claims in response to the Examiner=s Final Action in which the Examiner argued that the claims were obvious, since, in his opinion, and like the prior art applied, the presently claimed composite sheet comprised gathers.

[25] The disputed passage in the claims indicate that the two layers have equal dimensions in two directions before and after stretching, thereby clarifying that, in comparison to the prior art, the present invention does not result in such gathers. To support the addition of this feature to the claims, the Applicant pointed to the reference to Figure 2 (shown below) at page 9 of the present description and to page 13, lines 4-7 quoted below (both of which were present in the originally filed application):

> After [being] stretched, the first composite web 43 elastically contracts to its initial length between the second and third pairs of rolls 37, 38 to form a second composite web 44.

FIG.2



[26] The passage from page 13 indicates that the length of the composite web before and after the stretching step is the same

(i.e., there is no permanent change in length, unlike the situation where gathers are formed). This would also mean that the width is unchanged since the material is not separately stretched in the lateral direction during manufacture. If one were to wonder whether the maintaining of original length refers to the overall length of the composite web 44 in its bonded state while allowing for gathers to be formed between the bonding regions within that length, then reference to page 9, lines 15-21 and Figure 2 (shown above), as well as Figures 1 and 3 would serve to clarify the meaning of the page 13 passage.

[27] Figures 1-3 show different embodiments of the composite sheet product of the invention. None of the Figures illustrate gathers in any direction, which would suggest that there is a change in length of the individual layers during the stretching step of manufacture, as was part of the common general knowledge of the skilled person. The purpose of the stretching step during manufacture of the present invention is also discussed on page 13 as being to ensure that Aany bonded or mechanically entangled spots possibly having been formed among the first continuous fibers 35 of the first web 41 can be substantially loosened or disentangled.@ The purpose of this stretching is therefore simply to disentangle the continuous fibers, and not to permanently deform the fibrous layer.

[28] We are therefore of the opinion that it would be evident to the skilled person (and therefore reasonably to be inferred), upon reading the passages from page 13 of the specification in conjunction with the illustrations of the invention in the Figures, considered in light of their common general knowledge,

that the application as filed disclosed a composite sheet which does not contain gathers and therefore comprises an elastic sheet and fibrous assembly which has Aequal dimensions in two directions orthogonal to each other, before and after a step of stretching ...@

[29] We therefore find that the disputed subject matter added to claims 1 and 7 was to be reasonably inferred from the original specification and drawings and is compliant with section 38.2 of the *Patent Act*. As such, the following assessment under obviousness takes into account the added subject matter.

ISSUE #2: WOULD CLAIMS 1-12 HAVE BEEN OBVIOUS?

[30] Section 28.3 of the *Patent Act* sets out the conditions under which a claim may be found to be obvious:

> **28.3** The subject-matter defined by a claim in an application for a patent in Canada must be subject-matter that would not have been obvious on the claim date to

a person skilled in the art or science to which it pertains, having regard to

(a) information disclosed more than one year before the filing date by the applicant, or by a person who obtained knowledge, directly or indirectly, from the applicant in such a manner that the information became available to the public in Canada or elsewhere; and
(b) information disclosed before the claim date by a person not mentioned in paragraph (a) in such a manner that the information became available to the public in Canada or elsewhere.

[31] In *Apotex Inc. v. Sanofi-Synthelabo Canada Inc.,* 2008 SCC 61 *(Sanofi)* the Supreme Court put forward a useful four-step approach to performing the obviousness assessment, which we utilize in our own analysis below:

> (1) (a) Identify the notional "person skilled in the art";
>
> (b) Identify the relevant common general knowledge of that person;
>
> (2) Identify the inventive concept of the claim in question or if that cannot readily be done, construe it;
>
> (3) Identify what, if any, differences exist between the matter cited as forming part of the "state of the art" and the inventive concept of the claim or the claim as construed;
>
> (4) Viewed without any knowledge of the alleged invention as claimed, do those differences constitute steps which would have been obvious to the person skilled in the art or do they require any degree of invention?

[32] The Supreme Court in *Sanofi* equated obvious with Avery plain@

(*Sanofi* at para. 65).

Analysis

(1)(a) The person skilled in the art

[33] As noted earlier, there is no disagreement in relation to the Examiner=s characterization of the skilled person as Aa technician skilled in the art of elastic multi-layered composites.@

(1)(b) The relevant common general knowledge

[34] We have earlier at paras. [18] to [21] set out the relevant common general knowledge of the skilled person in relation to the assessment of new matter and so need not repeat it here.

(2) Identify the inventive concept or construe the claims

[35] It is understood that the obviousness analysis should normally be carried out for each claim at issue. However, as we have found below, independent claims 1 and 7 are unobvious. It therefore follows that the remaining dependent claims would also be unobvious and need not be separately assessed.

[36] Before looking at the inventive concepts of the claims, we briefly examine their construction, in order to provide a basis from which we determine the inventive concepts.

Claim Construction

[37] Prior to any assessment of validity it is required to purposively construe the claims in order to distinguish between the essential and non-essential elements (*Free World Trust v. Électro Santé Inc.*, [2000] 2 S.C.R. 1024 [*Free World*] at para. 19; *Whirlpool Corp. v. Camco Inc.*, [2000] 2 S.C.R. 1067 at para. 43).

[38] Per *Free World*, in order for an element of a claim to be considered Anon-essential@, Ait must be shown either (i) that on a purposive construction of the words of the claim it was clearly not intended to be essential or (ii) that at the date of publication of the patent, the skilled addressee would have appreciated that a particular element could be substituted without affecting the working of the invention@ (*Free World* at para. 55).

[39] In the present case there were no claim construction issues between the Examiner and the Applicant during prosecution. We also have no reason to conclude that any of the elements of the claims are non-essential. As per the description, the Applicant set out to provide an improved elastically stretchable composite sheet that avoided the problems of the prior art sheets (used for example as liquid impervious backsheets of disposable diapers), such as progressive disentanglement of short fibers causing a loss of structure and an undesirable fluffy surface.

[40] To accomplish the above objective the Applicant has set forth a composite sheet comprising a number of features which are

outlined in claim 1. The Applicant has also set forth a corresponding claim to a method of forming such a sheet. In our view each of the features of e.g., independent claims 1 and 7, contribute to the objective of creating a composite sheet which is suitable for use as a liquid impervious backsheet of a product such as a diaper, sanitary napkin or disposable gown.

[41] For example, the use of continuous fibers which extend across the sheet in the bond-free region addresses the prior art problems with the use of short fibers. Also, the particular materials and properties make the sheet suitable for its intended use as the aforementioned backsheet. Further, the matter added to the independent claims which refers to the components of the composite sheet having equal dimensions before and after stretching (i.e., no gathers) aligns with the intended use as a general backsheet for the products mentioned above. Also consistent with the lack of gathers is the feature of stretching the composite sheet to a point where the fibers of the fibrous assembly are disentangled and disbonded from each other and the elastic sheet, rather than continuing stretching to a point where the fibrous assembly is permanently deformed.

[42] In light of the above we take all of the elements of the claimed product and method to be essential.

The inventive concept

[43] In the SOR to the Board, the Examiner characterized the inventive concept of the claims as including:

1. an elastic fibrous or film layer made from block copolymerized polyester comprising hard and soft ingredients. The hard ingredient is obtained from dicarboxylic acid and diol. The soft ingredient is aliphatic polyester. The elastic layer has a moisture permeability of at least 1000 g/m^2/24 hrs (JIS Z 0208) and a water pressure resistance of at least 1 m (JIS L 1092); and
2. an inelastic fibrous layer comprising long continuous component fibers. The component fibers separate one from another in the regions where the elastic and inelastic layers are not bonded. The fibers have a diameter of 0.1 to 50 microns, and the inelastic layer has a basis weight of 2-100 g/m^2.

[44] In addition to the claimed features of the composite sheet of the claims, in the Final Action the Examiner=s characterization of the inventive concept of the claims included the contention that the composite sheet of the claims included gathers. Similarly, in the SOR the Examiner considered the formation of gathers to be an inherent result of the claimed invention.

[45] As noted above in relation to the issue of new matter, the formation of gathers was part of the common general knowledge. However, in assessing the issue of new matter we have determined that the present application does not disclose a composite sheet in which gathers are formed. As such we find that the inventive concept does not include the presence or formation of gathers.

[46] We also note that the particular hard and soft polymer ingredients (namely dicarboxylic acid and diol for the hard and an aliphatic polyester for the soft) included by the Examiner in his characterization of the inventive concept are not

specified in the claims, nor are they features such as inherent advantages flowing from the claimed subject matter. Therefore these also do not form part of the inventive concept.

[47] The Applicant has not contested any other points within the Examiner=s identification of the inventive concept, which generally reflects the features of the claims, and so we proceed on that basis, including of course the matter added to claims 1 and 7 in response to the Final Action. This matter, as noted within the new matter assessment above, clarifies that the claimed composite sheet and method of manufacturing such a sheet does not include the formation of gathers.

(3) Differences between the Astate of the art@ and the inventive concept

[48] The Examiner alleged that the claims were obvious based on two documents: a Canadian Patent no. 2,150,366 to Boich et al., and a Canadian Patent Application no. 2,248,575 to Mleziva et al.

[49] In the Final Action, the Examiner stated that the differences between the inventive concept of claim 1 and Boich et al. reside in the fact that:

> the elastic sheet of the present application is made from block copolymerized polyester comprising hard and soft ingredients. The liquid permeability of Boich et al.=s elastomeric layer/film is achieved by inclusion of perforations in the elastomeric film/layer.

[50] The Examiner did not identify the lack of gathers in the present

case as a difference with respect to Boich et al. as he felt that the claimed invention included the formation of gathers, like the Boich et al. composite sheet.

[51] In light of our analysis above under new matter and in identifying the inventive concept, this feature cannot be discounted as a difference. As explained below, this is in fact another difference between the inventive concept of claim 1 and Boich et al.

[52] As noted by the Examiner in the Final Action, Boich et al. also disclose a multi-layered elastic sheet-like structure, which like the present case, comprises an elastomeric layer (homogeneous film or sheet) and at least one inelastic fiber or filament layer connected to the elastomeric layer at spaced apart connection sites. In Boich et al. however, the composite sheet is formed such that gathers are created in the inelastic layer by extending the layer up to the vicinity of the breaking extension limit of the fibers or filaments. As discussed in Boich et al., the formation of folds or gathers increases the volume of the inelastic layer and creates a fluffy surface, which is particularly absorbent and therefore suitable for use as a skin contact layer in diapers. The presence of gathers in the final product is clearly illustrated in Figure 3 of Boich et al. (shown above in the discussion of common general knowledge).

[53] The above is contrasted with the present case where the final product has no gathers, and is merely stretched to a point sufficient to disentangle and disbond the fibers of the

inelastic layer from each other and the elastic layer, rather than to a point where the fibrous assembly is permanently deformed.

[54] We agree with the Examiner with respect to the other differences, namely the specification in claim 1 that the elastic layer is formed from block copolymerized polyester comprising hard and soft ingredients and that permeability of the elastic layer in Boich et al. is achieved through perforations rather than through permeability of the layer itself. Boich et al. do not specify a particular material for the elastomeric layer and with respect to the perforations providing the permeability, this is clear with reference to, e.g., page 5, lines 7-12 and Figure 3 of the Boich et al. document.

[55] No other differences between the inventive concept of claim 1 or claim 7 and Boich et al. have been set forth by the Examiner or Applicant.

[56] With respect to the Mleziva et al. document, this also discloses a composite elastic material sheet. The sheet is useful as garment pads, diapers and personal care products. The sheet is comprised of an elastic web formed of elastomeric ribbon-shaped elements joined to an extensible layer. The extensible layer may be a gatherable layer or an elastomeric and/or other stretchable layer joined either continuously or at spaced apart locations to the elastic web. When the extensible layer is a gatherable layer the elastic web is prestretched before bonding, with the release of tension

providing gathering of the extensible layer.

[57] Bonding between the elastic web and the extensible layer or layers can be point bonding or continuous bonding.

[58] In the Final Action, the Examiner pointed to Mleziva et al. as disclosing the use of a polyester elastomer as the material for the elastomeric layer, in particular a material called HytrelJ which uses the hard and soft polymer ingredients suggested by the description of the present case (see page 7 of the present application). The Applicant did not dispute this point. We agree that the use of a block copolymerized polyester comprising hard and soft ingredients is not a difference between the inventive concept of claim 1 and Mleziva et al.

[59] There is, however, as the Applicant noted in the submissions of June 20, 2013, a difference in the configuration of the elastic portion of the composite sheet in Mleziva et al. in comparison to that of the claims of the present application. In Mleziva et al. the elastic layer is formed of ribbon-shaped elastomeric elements, as opposed to conventional filaments or fibers having round cross-sections. (See e.g., page 4, lines 14-17, page 5, line 11 to page 6, line 6 and Figure 2 of Mleziva et al.). Mleziva et al. also disclose the particular advantages of such a configuration.

[60] In view of the above, Mleziva et al. differs from the inventive concept of claim 1 and claim 7 in that it suggests the use of gatherable material for the extensible absorbent layer and in that the configuration of the elastic layer is that of a

collection of ribbon-shaped elements as opposed to a fiber or continuous fibers.

[61] In sum, the prior art does not show a composite sheet or method of forming it such as that of claims 1 or 7 where the sheet is formed of an extensible layer which is smooth and contains no gathers, in combination with an elastic layer formed of a block copolymerized polyester comprising hard and soft ingredients, the elastic layer itself providing the desired permeability.

(4) Do the differences constitute steps that would have been obvious?

[62] In the Final Action, the Examiner alleged that claim 1 was obvious because:

> Mleziva et al.=s elastomeric layer could be used as an alternative to Boich et al.=s perforated elastomeric layer to obtain the desired moisture and liquid permeabilities.

[63] It is to be noted that this argument was put forward because the Examiner was of the view that the composite sheet of the claims included the presence of gathers, as was the case in the Boich et al. and Mleziva et al. references. As we have found earlier, that is not the case.

[64] In addition, at step 3 we have found that the elastic layer of the composite sheet of Mleziva et al. is formed of a plurality of ribbon-shaped elements as opposed to being formed of a solid film or continuous fibers as in claims 1 and 7. Therefore we agree with the Applicant=s submissions of June 20, 2013 that

even if the elastic portion of the composite sheet in Mleziva et al. was substituted for the perforated elastic layer of Boich et al., one would still not arrive at the composite sheet of the present claims.

[65] The Boich et al. document was particularly concerned with developing a composite sheet suitable for use in diapers with features such as a Asoft fluffy surface@ and a Alarge absorption and take-up capacity for liquid@ (see page 4 of Boich et al.)

[66] In contrast, the present application is concerned with a composite sheet for use as stock material for garments such as disposable diapers, sanitary napkins or disposable gowns. In particular, and as specified in claims 1 and 7, it is particularly concerned with a composite sheet for use as a liquid impervious backsheet of disposable body fluid absorbent articles. As such, the same considerations as the prior art do not apply, such as creating a fluffy surface, which the present application sought to avoid by not forming gathers in the fibrous assembly portion of the composite sheet.

[67] We see nothing in the prior art references to suggest forming a composite sheet with a combination of features such as those of claims 1 or 7, a sheet comprising an elastic layer and fibrous layers with features such as the fibrous layer lacking any gathers, contrary to the prior art, and the elastic layer itself providing a desired moisture permeability.

[68] The Boich et al. document emphasizes the formation of gathers so as to form a fluffy, absorbent surface suitable for use as

the inner layer of a diaper, which layer also provides permeability through the use of perforations, as opposed to permeability of the elastic layer itself as in the present application. Mleziva et al. is an example of another composite sheet, one which suggests the use of a gathered layer or a stretchable layer bonded to an elastic layer formed of a plurality of ribbon-shaped elements. Mleziva et al.=s focus on a more general application of the composite sheet and hence variability of the extensible layer leads us to the conclusion that, given the different focus of each of the Boich et al. and Mleziva et al. documents, and without foreknowledge of the Applicant=s inventive concept, there was no reason for the skilled person to combine their teachings. That said, even if one were led to view the two references in combination, it is the Board=s view that one would still not arrive at the invention of claims 1 and 7.

[69] While the person skilled in the art might choose to use the optional non-gatherable stretchable material of Mleziva et al. for the extensible layer, neither reference discloses an elastic layer with the properties of claims 1 and 7. Boich et al. provide perforations to provide permeability in the elastic layer. While Mleziva et al. disclose the use of an elastic layer formed of a material similar to that of the claims, its configuration is quite different in that it is specifically formed of a collection of ribbon-shaped elements.

[70] For the above reasons we find that independent claims 1 and 7 and therefore dependent claims 2-6 and 8-12 would not have been obvious and are therefore compliant with section 28.3 of the

Patent Act.

ISSUE #3: ARE CLAIMS 7 AND 12 INDEFINITE?

Legal Principles

[71] Subsection 27(4) of the *Patent Act* sets out the requirements that claims set out the invention in distinct and explicit terms:

> **27(4)** The specification must end with a claim or claims defining distinctly and in explicit terms the subject matter of the invention for which an exclusive privilege or property is claimed.

[72] The practical meaning of the above statute has been discussed in the classic passage from *Minerals Separation North American Corp. v. Noranda Mines Ltd.* [1947] Ex.C.R. 306 at 352 in relation to the equivalent former subsection 14(1):

> By his claims the inventor puts fences around the fields of his monopoly and warns the public against trespassing on his property. His fences must be clearly placed in order to give the necessary warning and must not fence in any property that is not his own. The terms of a claim must be free from avoidable ambiguity or obscurity and must not be flexible; they must be clear and precise so that the public will be able to know not only where it must not trespass but also where it may safely go. If a claim does not satisfy these requirements it cannot stand.

Analysis

[73] In the SOR to the Board, the Examiner, as a result of the amendments to the claims in response to the Final Action, pointed out that in claim 7 the term Asaid composite sheet@ has

no antecedent. In the submissions of June 20, 2013, the Applicant proposed amending this term to read Asaid elastically stretchable composite sheet@ which makes clear reference to the terminology used in the claim preamble. In our view this avoids any potential ambiguity in the claim and such amendment should therefore be required under paragraph 31(*c*) of the *Patent Rules*.

[74] The Examiner also noted in the SOR that, as a result of the same amendments noted above, claim 12 is indefinite as it makes reference to AThe method according to claim 1", whereas claim 1 is actually directed to the composite sheet product, not a method. The Applicant in the submissions of June 20, 2013 proposed amending claim 12 to refer to claim 7 instead. As this would avoid inconsistency between the subject matter of dependent claim 12 and the independent claim to which it refers it is our view that the Applicant=s proposed amendment should be required under paragraph 31(*c*) of the *Patent Rules*.

[75] Likewise, in response to the Examiner=s contention that claim 12 was also indefinite because the term Afibrous assembly@ did not refer to its antecedent by the use of a definite article, the Applicant proposed amending the claim to read Asaid fibrous assembly@. As this would also avoid any ambiguity, it is our view that the Applicant=s proposed amendment should be required under paragraph 31(*c*) of the *Patent Rules*.

ISSUE #4: DO CLAIMS 4 AND 10 LACK SUPPORT IN THE DESCRIPTION?

Legal Principles

[76] Section 84 of the *Patent Rules* specifies that each claim must be supported by the description:

> **84.** The claims shall be clear and concise and shall be fully supported by the description independently of any document referred to in the description.

Analysis

[77] In the Board=s letter to the Applicant of April 22, 2013, we pointed out that the additional subject matter of dependent claims 4 and 10 lacked support in the description. These dependent claims relate to the particular basis weight of the fibrous assembly of independent claims 1 and 7. In response, the Applicant, in the submissions of June 20, 2013, proposed amending the description to include the feature of these dependent claims. Since amendment of the specification to include subject matter which was reasonably to be inferred from the specification as originally filed is permitted under section 38.2 of the *Patent Act*, and in the present case this subject matter was present in the originally filed claims, we find the proposed amendment to be acceptable and therefore it should be required to be made under paragraph 31(*c*) of the *Patent Rules*.

RECOMMENDATION OF THE BOARD

[78] We recommend that the application not be refused for the reasons set out in the Final Action.

[79] We further recommend that the Applicant be informed that, in order to comply with subsection 27(4) of the *Patent Act*, and section 84 of the *Patent Rules*, the Applicant must submit an amendment under paragraph 31(*c*) of the *Patent Rules* such that:

> - claim 7 is amended to replace Asaid composite sheet@ with Asaid elastically stretchable composite sheet@;
> - claim 12 is amended to refer to claim 7 and such that the fibrous assembly is referred to as Asaid fibrous assembly@; and
> - the description is amended to include the particularly claimed basis weight of the fibrous assembly in dependent claims 4 and 10.

Stephen MacNeil	Paul Fitzner	Ed MacLaurin
Member	Member	Member

DECISION OF THE COMMISSIONER

[80] I concur with the findings and the recommendation of the Board. I hereby inform the Applicant that, in order to comply with subsection 27(4) of the *Patent Act*, and section 84 of the *Patent Rules*, the Applicant must submit amendments under paragraph 31(*c*) of the *Patent Rules* such that:

- claim 7 is amended to replace Asaid composite sheet@ with Asaid elastically stretchable composite sheet@;
- claim 12 is amended to refer to claim 7 and such that the fibrous assembly is referred to as Asaid fibrous assembly@; and
- the description is amended to include the particularly claimed basis weight of the fibrous assembly in dependent claims 4 and 10.

[81] The amendment under paragraph 31(*c*) of the *Patent Rules* must be submitted within three (3) months of the date of this decision failing which it is my intention to refuse the application.

Sylvain Laporte
Commissioner of Patents

Dated at Gatineau, Quebec,
this 7th day of November, 2013