

THE PATENTS ACT, 1970
(AMENDED BY THE PATENTS ACT 2005)
AND
THE PATENTS RULES, 2003
(AS AMENDED)

Section-15, 25(1)

In the matter of Patent Application No. 4697/DELNP/2010 filed on 29/06/2010

AND

In the matter of opposition by way of representation under Section 25(1) of The Patents Act 1970 as amended by the Patents (Amendment) Act 2005

AND

In the matter of Rule 55 of the Patents Rules, 2003 as amended by the Patents (Amendment) Rules, 2016

**LENZING AG,
WERKSTRASSE 2, A-4860 LENZING, AUSTRIA**

-----Applicant.

**GRASIM INDUSTRIES LIMITED,
BIRLAGRAM, NAGDA, MADHYA PRADESH -456331**

-----Opponent.

Note:

Application was filed on	: 29/06/2010
Publication date (U/S 11A)	: 11/11/2011
Request for examination date	: 29/11/2011
Opposition u/s 25 was filed on	: 21/04/2016
Date of first examination report (FER)	: 05/05/2017
FER reply received on	: 30/10/2017
Notice of opposition was sent to the applicant on	: 02/04/2019
Reply statement of opposition was filed by the applicant on	: 01/07/2019
Hearing Notice U/S 25(1) was sent	: 14/06/2022
Hearing with Applicant vs. Opponent	: 20/07/2022
Written submission of hearing U/S 25(1) by applicant	: 04/08/2022
Written submission of hearing U/S 25(1) by opponent	: 04/08/2022

Hearing U/S 25(1) was held on 20/07/2022

Present on **20/07/2022**:

1. RITUSHKA NEGI (IN/PA 243) OF REMFRY & SAGAR,
ATTORNEY FOR THE APPLICANT 'LENZING AG'.
2. ESSENESE OBHAN (IN/PA 864) OF OBHAN & ASSOCIATES,
ATTORNEY FOR THE OPPONENT 'GRASIM INDUSTRIES LIMITED'.

Initial filing details

Applicant	: LENZING AG
Date of filing of application	: 29/06/2010
Agent of the applicant	: Patent Agents from M/s. REMFRY & SAGAR.

Pre-grant opposition details

Opponent	: GRASIM INDUSTRIES LIMITED
Date of filing of opposition	: 21/04/2016
Agent of the opponent	: Patent Agents from M/S. OBHAN & ASSOCIATES

Examination details

First Examination Report (FER) date	: 05/05/2017
Reply to FER	: 20/06/2018

Notice of opposition details

Notice of opposition was sent to the applicant on : 02/04/2019

Reply statement of opposition was filed by the applicant on : 01/07/2019

Pregrant hearing Details

Hearing Notice-1 U/S 25(1) was sent on : 16/07/2020

Hearing Notice-2 U/S 25(1) was sent on (Adjournment by opponent) : 11/03/2022

Hearing Notice-3 U/S 25(1) was sent on : 08/04/2022

Hearing Notice-4 U/S 25(1) was sent on (Adjournment by applicant) : 25/04/2022

Hearing Notice-2 U/S 25(1) was sent on (Adjournment by opponent) : 14/06/2022

Hearing with Applicant vs. Opponent was conducted on : 20/07/2022

Written submission of hearing U/S 25(1) was filed by the applicant on : 04/08/2022

Written submission of hearing U/S 25(1) was filed by the opponent on : 04/08/2022

Decision

Facts of the case

1. **LENZING AG, of address (WERKSTRASSE 2, A-4860 LENZING, AUSTRIA;** hereinafter called as the ‘**Applicant**’, has filed an application for Patent on 29/06/2010 titled as ‘**MICROFIBER**’ through their agent M/s. REMFRY & SAGAR. The patent application has been numbered as **4697/DELNP/2010** (hereinafter called ‘instant application’).
2. Under the provisions of Section 11(A) of the Patents Act, 1970 the instant application was published on 11/11/2011 in the Patent Journal Number 45/2011. A request for examination (Form-18) was filed by the applicant on 29/11/2011.
3. The claims in the statement of claims in applicant’s complete specification were originally filed on 29/06/2010. Claim 1 was drafted as independent claim and claims 2-12 were directly or indirectly dependent on claim 1.
4. As per procedure laid down under Section 12 and 13 of the Patents Act, 1970 the application was examined and the First Examination Report (hereafter referred to as the FER) was issued

and informed to the applicant to meet the requirements of FER. FER was forwarded to the applicant's agent on 05/05/2017.

5. In response to the FER, applicant's agent submitted reply to the said FER on 30/10/2017. The claims filed initially were maintained. Total number of claims was 12.
6. GRASIM INDUSTRIES LIMITED, of address BIRLAGRAM, NAGDA, MADHYA PRADESH -45633, India; hereinafter called as the 'Opponent' has filed a Pre-Grant Opposition under Section 25(1) of the Patents Act 1970 on 21/04/2016 with a request for hearing through their agent M/S. OBHAN & ASSOCIATES.
7. The Opposition was taken on record and the applicant was informed accordingly on 02/04/2019 under the provisions of the Amended Rule 55(3) of the Patents Rules 2003. The applicant's agent has filed reply statement for the notice of opposition on 01/07/2019. Agent of the applicant requested for a hearing in reply statement.
8. Pregrant hearing notice was sent on 16/07/2020, 11/03/2022, 08/04/2022, 25/04/2022 and 14/06/2022. Finally, the pregrant hearing with Applicant vs. Opponent was conducted on 20/07/2022 in presence of representative from both applicant and opponent side. The written submission pursuant to hearing U/S 25(1) was filed by the applicant on 04/08/2022. And, the written submission pursuant to hearing U/S 25(1) was filed by the opponent on 04/08/2022.

Grounds of Opposition

9. The opponent, **GRASIM INDUSTRIES LIMITED**, vide opposition dated 21/04/2016, has put forward opposition u/s 25(1) on the following grounds:-

- 1) **Prior publication** (u/s. 25(1)(b)): *That the invention so far as claimed in any claim of the complete specification has been published before the priority date of the claim;*
 - (i) *in any specification filed in pursuance of an application for a patent made in India on or after the 1st day of January, 1912; or*
 - (ii) *in India or elsewhere, in any other document.*
- 2) **Prior use** (u/s. 25(1)(d)): *That the invention so far as claimed in any claim of the complete specification was publicly known or publicly used in India before the priority date of that claim.*
- 3) **Obviousness** (u/s. 25(1)(e)): *That the invention so far as claimed in any claim of the*

complete specification is obvious and clearly does not involve any inventive step, having regard to the matter published as mentioned in clause (b) or having regard to what was used in India before the priority date of the applicant's claim.

4) **Insufficiency** (w's. 25(1)(g)): *That the complete specification does not sufficiently and clearly describe the invention or the method by which it is to be performed.*

10. Summary of the opposition are mentioned herewith. The **opponent** mainly relied on patent publications GB362460, DE838936, US3539678, W01998/059100, AT287905, US4076933, US2004/0058072, US6250060 and WO2006/060835. The opponent also relied on "An excerpt of "Testing methods viscose, modal, lyocell and acetate staple fibres and tows"-BISFA"-2004 Edition and on 'attested copy of Invoice of Grasim Industries Ltd'.

In the ground of '**Prior Publication**' the opponent relied on GB362460, DE838936, US3539678 and W01998/059100. The opponent also submitted a comparison table with respect to cited documents. The opponent claimed that GB362460 "*provides a method for manufacturing threads from cellulose using viscose process. These threads have high dry and wet tenacity. GB362460 discloses single filaments having a titre of about 0.6 to 0.8 denier each (i.e. 0.66 to 0.88 dtex). Further, GB362460 discloses that such filaments have a dry tenacity of 3-4 g/den (i.e. 26.4-35.2 cN/tex), and a wet tenacity of 1 g/den or more (i.e. 8.83 cN/tex or more). It is submitted that although GB362460 does not specifically disclose that the fibers have the claimed wet modulus with an elongation of 5%, without any evidence to the contrary it is reasonable to deduce that said wet modulus is inherent to the fibers disclosed in GB362460. Therefore, it is clear from DI that the alleged invention lacks novelty*".

With regard to DE838936, the opponent mentioned that "*it provides a process for producing viscose threads. DE838936 discloses that the threads obtained by said process have individual fibre titre between 0.5-1.5 denier (0.55 to 1.66 dtex). Further, DE838936 discloses that the threads have a tenacity of 5 g/den (i.e. 44.15cN/tex). It is submitted that although DE838936 does not specifically disclose that the fibers have the claimed wet modulus with an elongation of 5%, without any evidence to the contrary it is reasonable to deduce that said wet modulus is inherent to the fibers disclosed in DE838936. Therefore, it is clear from DE838936 that the alleged invention lacks novelty*".

With regard to document US3539678 the opponent mentioned that US3539678 "*discloses viscose rayon filaments (polynosic high wet modulus or modal fibres) of excellent touch and good luster and having high wet modulus; such monofilaments are of 0.7- 5.0 deniers.*

..... Therefore, it is clear from US3539678 that the alleged invention lacks novelty”.

With regard to W01998/059100, the opponent mentioned that “it provides a method for preparing cellulose microfilaments with titre less than 0.7 dtex. In the absence of evidence to the contrary, it is reasonable to deduce that the claimed tenacity and the wet modulus are inherent to the fibers disclosed in W01998/059100. Therefore, it is clear from W01998/059100 D4 that the alleged invention lacks novelty”.

The Opponent further mentioned that “claim 2-12 of the impugned application also lacks novelty in view documents cited above..... It is submitted that claims 3-7 and 8-12 relate to yarn and planar textile respectively which are obtained from the fibers as claimed in claim 1. As the fibers as claimed in claim 1 clearly lack novelty, therefore, said yarn and planar textile cannot also be considered as novel”.

In the ground of ‘**Prior Use**’ the opponent mentioned that “the fibres claimed in the impugned application were being manufactured and used prior to the priority date. In this regard, Commercial Invoice No. 2952 dated 20/7/2006 issued by the Opponent to Welspun India Limited, Survey No. 666/667/675/700/775, Village-Varshamedi-Taluka-Anjur, Kutch (Gujarat)- 370110, has been annexed The invoice indicates that the claimed fibres were in fact being manufactured and sold by the opponent before the priority date. It is stated in the invoices that modal type fibre having titre value of 0.9 were manufactured and sold by the opponent. Further, a fibre is said to be of modal type, if it meets the definition provided by BISFArespectively were used commercially prior to the priority date of the impugned application. The impugned application is thus liable to be rejected on the basis of this ground alone”.

In the ground of ‘**OBVIOUSNESS**’ the opponent relied on GB362460, DE838936, US3539678, W01998/059100, AT287905, US4076933, US2004/0058072, US6250060 and WO2006/060835. The opponent already explained about first four citations.

Regarding document AT287905 the opponent mentioned that it “discloses a process for preparing high strength threads of regenerated cellulose as claimed in claim 1 of the alleged application. It is thus reasonable to deduce that such regenerated fibres are inherently disclosed in AT287905”.

Regarding document US4076933 the opponent mentioned that it “discloses regenerated cellulosic staple fibre with a trilobal cross-section and yarns prepared from said fibres and knit or woven fabrics comprising said cellulosic fibres. It is submitted that it would be obvious to a person skilled in the art in view of US4076933 to select a particular cellulosic

fibres to obtain for yarns and fabrics with improved strength and tenacities. Further, it is submitted that combination of GB362460 and US4076933 suggests yarns prepared from fibres having the same range of fineness as the claimed yarns of the alleged application. Therefore, US4076933 in combination with GB362460/DE838936/US3539678, or W01998/059100 renders the claims 1-12 of the alleged application obvious”.

Regarding document US2004/0058072 the opponent mentioned that it “suggests that cellulosic fibres may be combined with other fibres including non-cellulosic fibres to obtain yarns and textiles. Thus, US2004/0058072 when combined with GB362460/ DE838936/ US3539678 or W01998/059100, renders the claims 6, 7, 11 and 12 obvious. Also, US2004/0058072 when combined with GB362460/ DE838936/ US3539678 or W01998/059100, and US4076933 renders the claims 1-12 obvious”.

Regarding document US6250060 the opponent mentioned that “US6250060 suggests that cellulosic fibres, such as cotton, may be combined with other fibres including polyester to obtain knit fabrics. Thus US6250060 when combined with D11 D2/ D3 or D4 renders the claims 6, 7, 11 and 12 obvious. Also, D8 when combined with GB362460/ DE838936/ US3539678 or W01998/059100, and US4076933 renders the claims 1-12 obvious”.

Regarding document W02006/060835, the opponent mentioned that “W02006/060835 also filed by the present applicant, discloses a multilobal cellulosic staple fiber, which has a It is submitted that it is known that tenacity and wet modulus of a multilobal cellulosic staple fiber or a modal fibre is determined using the above formula. Accordingly, the applicant has modified the titre value of the fibres disclosed in W02006/060835 to arrive at the alleged invention. It is thus submitted that W02006/060835 when combined GB362460/ DE838936/ US3539678 or W01998/059100, renders the alleged invention obvious. Therefore, the alleged invention lacks inventive step”.

The opponent claimed that “that the alleged invention as claimed in the impugned application is obvious and lacks any inventive step in view of the above submissions regarding GB362460, DE838936, US3539678, W01998/059100, AT287905, US4076933, US2004/0058072, US6250060 and W02006/060835. Therefore, the Opponent requests that the impugned application ought to be refused”.

In the ground of ‘INSUFFICIENCY’ the opponent mentioned that “the impugned application does not sufficiently and fairly describe the invention in a manner so as to enable a person skilled in the art to perform or work the invention. In respect of this ground, the Opponent relies on the following submissions. The detailed description of the alleged application states on page 8, lines 20-26 that the process parameters disclosed in

AT287905 have to be appropriately adapted in order to obtain high-strength regenerated fibers as claimed in claim 1. However, it is not clear which parameter(s) and to what extent is required to be adapted by a person skilled in the art to obtain the desired strength. In the absence of such details, a person skilled in the art will not be able to work the present invention to obtain the desired result. In claim 1, "tenacity" and "wet modulus" are expressed in "cN/tex", which differs from that in the detailed description i.e. on page 8 lines 10-13 'tenacity" and "wet modulus" have been expressed in "cN". This clearly indicates that the complete specification of the impugned application is ambiguous. Further, complete specification of the impugned application characterizes the cellulosic regenerated fiber's tenacity in the conditioned state. However, nowhere in the description the applicant has defined the phrase "the conditioned state". In the absence of such details, a person skilled in the art will not be able to arrive at the present invention.

In view of the above arguments, it is clear that the impugned application does not meet the sufficiency requirement of an application, and the specification of the patent application does not disclose the invention clearly and completely enough for it to be performed by a person skilled in the art. Therefore, the impugned application is ought to be refused”.

Applicant’s reply statement

11. Regarding the opposition filed by GRASIM INDUSTRIES LIMITED, the applicant filed reply statement to the notice of opposition on 01/07/2019. Applicant submitted a para wise detailed reply to the opposition made by GRASIM INDUSTRIES LIMITED. However, summary of the reply are mentioned herewith. The applicant mentioned that “*Contents of paragraph 1 do not merit a reply; 1.1 Contents of this paragraph are strongly denied; 1.2 Contents of this paragraph are denied, as the Opponent fails to substantiate its claim; 1.3 Contents of this paragraph are denied. The Opponent fails to substantiate as to how the subject application is obvious in light of prior publication or prior use in India before the priority date of subject application; 1.4 Contents of this paragraph are denied as the subject application sufficiently and clearly describes the claimed invention”.*

Regarding GB362460 the applicant submitted that “*the claimed invention is novel and inventive over the cited prior art document GB362460..... there is nothing in GB362460 that would suggest that the disclosed fibres inherently possess the claimed wet modulus features of the subject application”.*

Regarding DE838936 the applicant submitted that “*DE838936 fails to disclose that the fibres have the wet modulus with an elongation of 5%”*

Regarding US3539678, the applicant submitted that “US3539678 fails to suggest that the disclosed fibres inherently possess the claimed dry tenacity in the conditioned state”.

Regarding W01998/059100, the applicant submitted that “The cited document W01998/059100 discloses fibres with low titers. The fibres obtained from W01998/059100 are useful for non-woven's with high water retention values. The Opponent has simply assumed that the tenacity and wet modulus are inherent to the fibres disclosed in W01998/059100 without adducing any credible submission or evidence. The mechanical properties pertaining to tenacities, wet modulus are not disclosed in W01998/059100. Therefore, the cited document W01998/059100 lacks novelty and fails to disclose inventive step claimed in the subject application.”

In the ground of ‘Prior Use’ the applicant submitted that “the invoice submitted by the Opponent is not sufficient to prove the prior use. The titre of the fibre in the invoice is 0.9 den. With the conversion factor 1 den= 1.11 dtex, the titre of the sold fibre is 1 dtex, which is above the claimed upper limit of 0.9 dtex in claim 1 of the subject application”.

In the ground of ‘**OBVIOUSNESS**’ the applicant replied that “The remarks made by the opponent in table 3 with respect to documents D1-D9 do not provide any support to establish that the invention of the subject application is obvious in view of the said documents”.

Regarding AT287905 the applicant submitted that “Simply because AT287905 mentions high strength threads of regenerated cellulose, it cannot be assumed that it discloses the tenacity and wet modulus elongation of the subject application”.

Regarding US4076933, the applicant submitted that “US4076933 fails to teach each and every limitation of claim 1 of the subject application, nor are these limitations suggested by US4076933”.

Regarding US2004/0058072, the applicant submitted that “US2004/0058072 is not related to fibre according to the present claim 1 of the subject application. US2004/0058072 concerns only a fabric comprising yams of cellulosic fibres, where on yam is made of hydrophobic treated cellulosic fibres”.

Regarding US6250060, the applicant submitted that “US6250060 is not related to fibre according to the present claim 1 of the subject application. US6250060 discloses a method of producing improved knit fibres, which is not consistent with the claimed novel/ inventive feature of the claim 1 of the subject application”.

Regarding WO2006/060835 the applicant submitted that “WO2006/060835 is not related to fibre according to the present claim 1 of the subject application. WO2006/060835 discloses multilobal fibres with fulfil the modal”.

In the ground of ‘INSUFFICIENCY’ the applicant submitted that “*the specification of the subject application clearly and sufficiently describes the claimed invention and the best method to perform the claimed invention*”.

Written submissions of pregrant hearing

12. The written submission submitted with arguments in line with the reply statement made by the applicant on 04/08/2022. The written submission submitted with arguments by the opponent on 04/08/2022.

13. Now, based upon the representation of pre-grant opposition, reply statement of the applicant, hearing arguments, written submission of pregrant hearing of applicant, written submission of pregrant hearing of opponent and according to the merit of the application, I have to decide the matter on the pregrant opposition on the grounds raised by the Opponent. The arguments, explanation, written submissions and annexures by applicant and opponent have been carefully considered.

Decision

- 14.1 Claim 1, the principal claim dated 29/06/2010 in the statement of claims in the applicant’s complete specification originally filed is read as follows

1. High-tenacity cellulosic regenerated fibre with an individual fibre titre T between 0.6 and 0.9 dtex, preferably between 0.6 and 0.8 dtex, characterised in that this reveals a tenacity (B_c) in the conditioned state of $B_c(\text{cN/tex}) \geq 1.3\sqrt{T} + 2T$ and a wet modulus (B_m) with an elongation of 5% of $B_m(\text{cN/tex}) \geq 0.5 \cdot \sqrt{T}$.

Claims 2-12 were directly or indirectly dependent on claim 1. Pregrant opposition was filed on 21/04/2016 based on claims dated 29/06/2010. ‘First Examination Report’ was issued to the applicant on 05/05/2017. Thereafter, the applicant filed FER reply on 30/10/2017. Claim 1, the principal claim dated 30/10/2017 in the statement of claims in the applicant’s FER Reply is read as follow:

1. High-tenacity cellulosic regenerated fibre with an individual fibre titre T between 0.6 and dtex, preferably between 0.6 and 0.8 dtex, characterised in that this reveals a tenacity (B_c) $\geq 30 \text{ cN/tex}$ in the conditioned state $B_c(\text{cN/tex}) \geq 1.3\sqrt{T} + 2T$ and a wet modulus (B_m) with an elongation of at 5% of $\geq 5.0 B_m(\text{cN/tex}) \geq 0.5 \cdot \sqrt{T}$.

It may be noted that claim 1 dated 30/10/2017 is not identical with claim 1 dated 29/06/2010. Claims 2-12 were directly or indirectly dependent on claim 1. Further, a formal request on Form 30 along with prescribed official fee, for rectification of clerical error in claim 1, under Section 78(2) of the Patents Act, 1970 was filed by the applicant on 11/08/2020. Claim 1, the principal claim dated 11/08/2020 in the statement of claims is read as follow:

1. High-tenacity cellulosic regenerated fibre with an individual fibre titre T between 0.6 and 0.9 dtex, preferably between 0.6 and 0.8 dtex, characterised in that this reveals a tenacity (B_c) ≥ 30 cN/tex in the conditioned state and a wet modulus (B_m) with an elongation at 5% ≥ 5.0 .

Claims 2-12 were directly or indirectly dependent on claim 1. It is clear from the marked up copy of claims filed on 11/08/2020 that while filing response to the first examination report "0.9" was inadvertently been omitted from claim 1 of the subject application. Hence, request for rectification of clerical error is allowed.

Further, a Form 13 was filed on 18/07/2022 to amend the claims by way of correction and explanation in order to ascertain and describe the invention better. The amended claim 1 dated 18/07/2022 is as follow:

1. A high-tenacity cellulosic regenerated fibre with an individual fibre titre T between 0.6 and 0.9 dtex, preferably between 0.6 and 0.8 dtex, characterised in that this reveals a tenacity (B_c) ≥ 34.5 cN/tex in the conditioned state and a wet modulus (B_m) with an elongation at 5% ≥ 5.6 cN/tex.

The value of tenacity (B_c) and wet modulus (B_m) in claim 1 were further modified. As the value restricts the scope of the claim 1 and supports of amendments are there in description; hence this amendment in claim 1 is allowed. Claims 2-12 were directly or indirectly dependent on claim 1. Amendments made on 18/07/2022 in dependents claims also do not alter the scope of the claimed subject matter. Hence Form 13 dated 18/07/2022 is allowed. In the pregrant hearing conducted on 20/07/2022, both the applicant and opponent were agreed to place their arguments on the basis of claims filed on 18/07/2022. Ms. RITUSHKA NEGI (Patent Agent No. 243) was present in the pregrant hearing on behalf of applicant. Mr. Essenese Obhan (Patent Agent No. 864) was present in the pregrant hearing on behalf of opponent. The documents such as initially filed claims, descriptions, pregrant oppositions, First Examination Report (FER), amendments made thereafter, pregrant notice, reply statement, pregrant hearing notice, written submissions, etc. are available at <http://www.ipindia.nic.in>. These documents are not replicated here.

14.2 Different grounds of Section 25(1) of The Patents Act were mentioned in pregrant opposition. Opponent mainly mentioned four grounds under Sections 25(1)(b), 25(1)(d), 25(1)(e), and 25(1)(g) of The Patents Act. Now, I analyse each of the ground one by one and decide the pregrant matter accordingly.

Prior publication (U/S. 25(1)(b): Lacks Novelty

In the ground of 'Prior Publication' the opponent relied on GB362460A, DE838936C, US3539678 and W01998/059100 in pregrant opposition. Thereafter in written submission of pregrant the opponent mainly relied on AT287905B for this ground.

While analysing, it has been observed that, **GB362460A** discloses a high-tenacity cellulosic regenerated fibre with an individual fibre titre T between 0.67 and 0.89 dtex (0.6-0.8 denier). It also discloses about maximum dry tenacity of 3-4 gpd (i.e. 26.54- 35.40 cN/tex) and wet tenacity of 1.5-2 gpd (i.e.13.27-17.7 cN/tex). However D1 does not explicitly disclose that tenacity value was measured in the conditioned state. Further, GB362460A fails to explicitly disclose both the characterizing features of claim 1 of the instant application i.e. a tenacity (Bc) \geq 34.5 cN/tex in the conditioned state and a wet modulus (Bm) with an elongation at 5% \geq 5.6 cN/tex. Hence, GB362460A fails to explicitly disclose all the features of claim 1 of the instant application.

DE838936C discloses a high-tenacity cellulosic regenerated fibre with an individual fibre titre T between 0.5-1.5 denier (i.e. 0.55-1.66 dtex). It also discloses that the threads have a tenacity of greater than 5 g/den (i.e. 44.15 cN/tex). However, DE838936C fails to disclose one of the characterizing features of claim 1 of the instant application i.e. a wet modulus (Bm) with an elongation at 5% \geq 5.6 cN/tex. Nothing disclosed/suggested in DE838936C that claimed wet modulus would be 'inherent' to the fibres of the instant application. Hence, DE838936C fails to explicitly disclose all the features of claim 1 of the instant application.

US3539678 discloses a high-tenacity cellulosic regenerated fibre with an individual fibre titre T of 0.7 denier (i.e. 0.77 dtex). It also discloses about maximum dry tenacity 2.93 gpd (i.e. 26 cN/tex) and wet tenacity 1.96 gpd (i.e.17.34 cN/tex). However, tenacity value was not measured in the conditioned state. Further, US3539678 fails to disclose both the characterizing features of claim 1 of the instant application i.e. a tenacity (Bc) \geq 34.5 cN/tex in the conditioned state and a wet modulus (Bm) with an elongation at 5% \geq 5.6 cN/tex. Nothing disclosed/suggested in US3539678 that claimed wet modulus would be 'inherent' to the fibres of the instant application. Hence, US3539678 fails to explicitly disclose all the features of claim 1 of the instant application.

W01998/059100 discloses cellulose microfilaments with titers of 0.5 to less than 1 dtex. However, W01998/059100 fails to disclose both the characterizing features of claim 1 of the instant application i.e. a tenacity (Bc) ≥ 34.5 cN/tex in the conditioned state and a wet modulus (Bm) with an elongation at 5% ≥ 5.6 cN/tex. Nothing disclosed/suggested in W01998/059100 that claimed wet modulus would be 'inherent' to the fibres of the instant application. Hence, W01998/059100 fails to explicitly disclose all the features of claim 1 of the instant application.

At this point it is pertinent to mention in pregrant hearing the opponent mostly emphasizes on citation **AT287905B**. Though, AT287905B was not cited U/S. 25(1)(b) in pregrant opposition letter dated 21/04/2016 but in the written submission of pregrant hearing dated 04/08/2022 the opponent bring this citation under U/S. 25(1)(b). Further the opponent submitted that the present application is an attempt of evergreening over AT287905B. The opponent has submitted a certified English translation of AT287905B along with their opposition letter. However, the same has also been verified with machine translation of Espacenet.

AT287905B discloses a process for preparing high strength threads of regenerated cellulose. AT287905B also discloses that the fibres having tear strength of 4.6 p/den (or g/den) (i.e. 40.7 cN/tex) in conditioned state. It also discloses wet modulus of at least 10 p / den, preferably 12 to 16 p / den. The units for tear strength and wet modulus are not so common. However, the applicant in their written argument dated 04/08/2022 at page 13 mentioned that AT287905 discloses "*fibres with dry tenacity 4.6 g/den (i.e. 40.6 cN/tex), wet tenacity of 2.8 g/den (i.e. 24.7 cN/tex) and having wet modulus 14.0 g/den (123.6 cN/tex)*". In another example AT287905B discloses wet modulus of 8.0 g/den (i.e. 70.6 cN/tex). However, AT287905 does not discloses microfibers having a fiber titre between 0.6- 0.9 dtex, as claimed in the instant application.

As mentioned by the opponent, I have studied "Para 7.5 of Guidelines for the Examination of Patent Applications in the field of Pharmaceuticals". In light of the guideline I observed that nothing disclosed/suggested in AT287905 that claimed titer value 'inherent' to the fibres of the instant application.

Regarding, paragraph 58 of the decision of the IPAB in Enercon (India) Limited vs Aloys Wobben ORA/6/2009/PT/CH, ORDER (No. 18 of 2013) on 'But it is necessary that the result is a necessary consequence of what was deliberately intended in the invention', it has been observed that the instant application claimed a fibre, yarn and planner textile structure. Claimed fibres are being defined with titer, tenacity and wet modulus.

The opponent mentioned the landmark decision of the Hon'ble Supreme Court of India in the matter of Bishwanath Prasad Radhey Shyam vs. Hindustan Metal Industries, 1979(2) SCR 757, decided on 13.12.1978 whereby the Hon'ble Supreme Court of India observed as follows:

“The fundamental principle of Patent Law is that a patent is granted only for an invention which must be new and useful. That is to say, it must have novelty and utility. It is essential for the validity of a patent that it must be the inventor's own discovery as opposed to mere verification of what was, already known before the date of the patent.”

However, it has already been established that technical matter claimed in claim 1 of the instant application has not been disclosed in cited prior art. Further, for the judgment on Prior publication (U/S. 25(1)(b) on Lacks in Novelty, the following Section is most important:

Section 2 (1)(j) of The Patents Act, 1970 defines invention as: “invention” means a new product or process involving an inventive step and capable of industrial application.

Further, the following order of Hon'ble Bombay High Court is also relevant.

Hon'ble Bombay High Court in Hoechst A.G v. Unichem Laboratories (1969) RPC 55, states on para 15 that “To anticipate a patent, a prior publication or activity must contain the whole of the invention impugned; i.e., all the features by which the particular claim attacked.”

So, it is a well settled position that a novelty destroying art should disclose the invention fully and unmistakably & it should be disclosed in a single document published prior to the date of any claim.

Further, for anticipation or judging novelty of a product the following is relevant:

“To be an anticipating reference, an item must be disclose each and every element of the claimed invention (Law of patents Elizabeth Verkey, page 28)”

Therefore, for the purpose of the ground of Prior publication (U/S. 25(1)(b) on Lacks in Novelty, all the features claimed in the claims should specifically disclosed in the single prior art document. I could not able to find all the features of the present invention as claimed in a single document from the documents presented by the Opponent. From the plain reading of the citations and the analysis made above none of the citations disclose all the features of claim 1, therefore, the ground of opposition under section 25(1)(b) on Novelty has not been established by the Opponent.

In view of the same, I have formed the opinion that Opponents have failed to prove this ground on 25(1)(b). Therefore the opposition ground of lack of Novelty/Anticipation under Section 25(1)(b) is dismissed.

Prior Use (U/S. 25(1)(d)):

The Opponent submitted that fibers claimed in the subject application were being manufactured and used prior to the priority date of subject application. The opponent referred to Commercial Invoice No. 2952 dated 20/7/2006. In the original representation the same invoice was submitted (running page 170) by the opponent. But this document does not disclose any technical specification; rather it is a type of commercial in nature. Further, the invoice submitted by the opponent is not legible. Hence such prior use itself is doubtful and does not disclose the features of the alleged invention.

According to P. Narayan's 'Patent Law', Fourth Edition, Page 208: "Prior use doubtful, where the opponent's case on prior use did not more than raise a small doubt as to whether a valid patent could issue, the proper course might be to allow the application to proceed to grant. [Gallay Ltd.'s Appln.(1959) RPC141]."

Therefore, I refuse to consider the invoice as valid prior use documents and the opposition ground of Prior Use Under Section 25(1)(d) is dismissed.

Obviousness (U/S. 25(1)(e)):

The opponent mentioned GB362460, DE838936, US3539678, W01998/059100, AT287905, US4076933, US2004/0058072, US6250060 and WO2006/060835 in their opposition letter U/S 25(1)(e).

Considering all the documents mentioned under U/S. 25(1)(e), while analysing, it has been observed that, **GB362460A** discloses a high-tenacity cellulosic regenerated fibre with an individual fibre titre T between 0.67 and 0.89 dtex (0.6-0.8 denier). It also discloses about maximum dry tenacity of 3-4 gpd (i.e. 26.54- 35.40 cN/tex) and wet tenacity of 1.5-2 gpd (i.e.13.27-17.7 cN/tex). However D1 does not disclose that tenacity value was measured in the conditioned state. Further, GB362460A fails to disclose both the characterizing features of claim 1 of the instant application i.e. a tenacity (Bc) \geq 34.5 cN/tex in the conditioned state and a wet modulus (Bm) with an elongation at 5% \geq 5.6 cN/tex. Nothing disclosed/suggested in **GB362460A** that claimed wet modulus would be 'inherent' to the fibres of the instant application.

DE838936C discloses a high-tenacity cellulosic regenerated fibre with an individual fibre titre T between 0.5-1.5 denier (i.e. 0.55-1.66 dtex). It also discloses that the threads have a tenacity of greater than 5 g/den (i.e. 44.15 cN/tex). However, DE838936C fails to disclose one of the characterizing features of claim 1 of the instant application i.e. a wet modulus (Bm) with an elongation at 5% \geq 5.6 cN/tex. Nothing disclosed/suggested in DE838936C that claimed wet modulus would be ‘inherent’ to the fibres of the instant application. However, the Opponents mentioned that they do not wish to pursue the objections with respect to document DE838936C.

US3539678 discloses a high-tenacity cellulosic regenerated fibre with an individual fibre titre T of 0.7 denier (i.e. 0.77 dtex). It also discloses about maximum dry tenacity 2.93 gpd (i.e. 26 cN/tex) and wet tenacity 1.96 gpd (i.e.17.34 cN/tex). However, tenacity value was not measured in the conditioned state. Further, US3539678 fails to disclose both the characterizing features of claim 1 of the instant application i.e. a tenacity (Bc) \geq 34.5 cN/tex in the conditioned state and a wet modulus (Bm) with an elongation at 5% \geq 5.6 cN/tex. Nothing disclosed/suggested in US3539678 that claimed wet modulus would be ‘inherent’ to the fibres of the instant application.

W01998/059100 discloses cellulose microfilaments with titers of 0.5 to less than 1 dtex. However, W01998/059100 fails to disclose both the characterizing features of claim 1 of the instant application i.e. a tenacity (Bc) \geq 34.5 cN/tex in the conditioned state and a wet modulus (Bm) with an elongation at 5% \geq 5.6 cN/tex. Nothing disclosed/suggested in W01998/059100 that claimed wet modulus would be ‘inherent’ to the fibres of the instant application. However, the Opponents mentioned that they do not wish to pursue the objections with respect to document W01998/059100.

AT287905B discloses a process for preparing high strength threads of regenerated cellulose. AT287905B also discloses that the fibres having tear strength of 4.6 p/den (or g/den) (i.e. 40.7 cN/tex) in conditioned state. It also discloses about wet modulus of at least 10 p / den, preferably 12 to 16 p / den. The units for tear strength and wet modulus are not so common. However, the applicant in their written argument dated 04/08/2022 at page 13 mentioned that AT287905 discloses “*fibres with dry tenacity 4.6 g/den (i.e. 40.6 cN/tex), wet tenacity of 2.8 g/den (i.e. 24.7 cN/tex) and having wet modulus 14.0 g/den (123.6 cN/tex)*”. In another example AT287905B discloses wet modulus of 8.0 g/den (i.e. 70.6 cN/tex). However, AT287905 does not discloses microfibers having a fiber titre between 0.6- 0.9 dtex, as claimed in the instant application.

US4076933 discloses regenerated cellulosic staple fibre with a different cross-section with an individual fibre titre T between 0.45 dtex-1.15 dtex (0.50-1.28 denier). It also discloses that fibre having tenacity of 1.44 gpd -2.31 gpd (examples 2-8) [12.75-20.45cN/Tex] in conditioned state and wet modulus of 0.31 gpd -0.70 gpd [2.75-6.2cN/Tex]. The range mentioned in tenacity and modulus was for different shaped fibres. Therefore, it fails to disclose both the characterizing features of claim 1 of the instant application i.e. a tenacity (Bc) \geq 34.5 cN/tex in the conditioned state and a wet modulus (Bm) with an elongation at 5% \geq 5.6 cN/tex. Nothing disclosed/suggested in **US4076933** that claimed wet modulus would be 'inherent' to the fibres of the instant application. However, the Opponents mentioned that they do not wish to pursue the objections with respect to document US4076933.

US2004/0058072 discloses a fabric comprising yams of cellulosic fibres, where on yam is made of hydrophobic treated cellulosic fibres. US2004/0058072 fails to disclose High-tenacity cellulosic regenerated fibre, individual fibre titre T between 0.6 and 0.9 dtex (0.6 and 0.8 dtex), Fiber Tenacity (Bc) \geq 34.5 cN/tex in the conditioned state and fiber wet modulus (Bm) with an elongation at 5% \geq 5.60 cN/tex. However, the Opponents mentioned that they do not wish to pursue the objections with respect to document US2004/0058072.

US6250060 discloses a method of producing improved knit fibres. It fails to disclose High-tenacity cellulosic regenerated fibre, individual fibre titre T between 0.6 and 0.9 dtex (0.6 and 0.8 dtex), Fiber Tenacity (Bc) \geq 34.5 cN/tex in the conditioned state and fiber wet modulus (Bm) with an elongation at 5% \geq 5.60 cN/tex. However, the Opponents mentioned that they do not wish to pursue the objections with respect to document US6250060.

WO2006/060835 discloses a high-tenacity cellulosic regenerated fibre with an individual fibre titre T between 1.0 to 30 dtex, preferably more than 3.0 dtex. It also discloses that fibre having tenacity of 30 cN/tex for titer value 6.1 dtex (Example 2) and wet modulus of 6.5 cN/tex for titer value 3.3 dtex (Example 2). However, WO2006/060835 does not disclose about microfiber. Titre values of WO2006/060835 is between 1.0 to 30 dtex i.e. even the lower limit of titre is greater than the claimed upper limit of fibre as claimed in the subject invention. Further WO2006/060835 discloses a tenacity of 30 cN/tex for titer value 6.1 dtex; thus it does not disclose high strength microfibers.

While analysing the ground of opposition of Obviousness and lack of inventive step (U/S. 25(1)(e)), the following portion is important here:

“that the invention so far as claimed in any claim of the complete specification is obvious and clearly does not involve any inventive step, having regard to the matter published as mentioned in clause (b) or having regard to what was used in India before the priority date of the applicant's claim”;

Inventive step is defined under Section 2(1)(ja) of The Patents Act 1970 as follows:

"Inventive Step" means a feature of an invention that involves technical advance as compared to the existing knowledge or having economic significance or both and that makes the invention not obvious to a person skilled in the art.

I have carefully considered both the submission made by the Applicant and the Opponent. I relied upon: **F. Hoffman la Roche v Cipla case**, the Hon'ble Delhi High Court laid out the following points which need to be Objectively judged to ascertain whether, looking at the invention as a whole, the invention does have inventive step or not:

- (i) *Identify the “person skilled in the art”, i.e. competent craftsman or engineer as distinguished from a mere artisan;*
- (ii) *Identify the relevant common general knowledge of that person at the priority date;*
- (iii) *Identify the inventive concept of the claim in question or if that cannot readily be done, construe it;*
- (iv) *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;*
- (v) *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 inventive ingenuity?*

The main object of the instant application is to provide a high-tenacity cellulosic regenerated fibre with an individual fibre titre T between 0.6 and 0.9 dtex, tenacity (Bc) \geq 34.5 cN/tex in the conditioned state and wet modulus (Bm) with an elongation at 5% \geq 5.6 cN/tex. Whether, the applicant further improved upon the existing product. So a question arises what is an improvement?

Accordingly Definitions of improvement are:

- A change which makes the quality or condition of somebody/something better.
- An occasion when something gets better or when you make it better.

- The act of improving something; "their improvement increased the value of the property".

So there is always scope or room for improvement of technology/product. Any person can improve technology/product that leads to further progress and new development. The fineness (titer) values of the high-tenacity cellulosic regenerated fibres as claimed in the instant application clearly exhibits technical improvements over the prior art AT287905B (mentioned as D5 by opponent and applicant). An individual fibre titre T between 0.6 and 0.9 dtex is clearly better than fine fibre of AT287905B. Further, the tenacity values of the instant application also show an improvement over cited prior art. When the applicant's invention is claiming a finer fibre it cannot be said that the applicant's invention is obvious and lacking in inventive steps, just because the manufacturing steps in the process are known, without sufficient proof on fibre fineness and properties. Simply stating that steps in the process involved to produce the fibre are well known in the art is not sufficient. The instant application does not claim a process rather it claims a product.

Though, GB362460A discloses a high-tenacity cellulosic regenerated fibre with an individual fibre titre T between 0.67 and 0.89 dtex (0.6-0.8 denier). But, it fails to disclose both the characterizing features of claim 1 of the instant application i.e. a tenacity (B_c) ≥ 34.5 cN/tex in the conditioned state and a wet modulus (B_m) with an elongation at 5% ≥ 5.6 cN/tex. Nothing disclosed/suggested in GB362460A that claimed wet modulus would be 'inherent' to the fibres of the instant application. Further, no teaching or motivations either available or pin pointed by the opponent in GB362460A so that it can be combined with other cited documents.

Though, US3539678 discloses a high-tenacity cellulosic regenerated fibre with an individual fibre titre T of 0.7 denier (i.e. 0.77 dtex). But, it fails to disclose both the characterizing features of claim 1 of the instant application i.e. a tenacity (B_c) ≥ 34.5 cN/tex in the conditioned state and a wet modulus (B_m) with an elongation at 5% ≥ 5.6 cN/tex. Nothing disclosed/suggested in US3539678 that claimed wet modulus would be 'inherent' to the fibres of the instant application. Further, no teaching or motivations either available or pin pointed by the opponent in GB362460A so that it can be combined with other cited documents.

WO2006/060835 discloses a high-tenacity cellulosic regenerated fibre with an individual fibre titre T between 1.0 to 30 dtex. WO2006/060835 does not disclose about microfiber. Titre values of WO2006/060835 is between 1.0 to 30 dtex i.e. even the lower limit of titre is greater than the claimed upper limit of fibre as claimed in the subject invention. Further

WO2006/060835 discloses a tenacity of 30 cN/tex for titer value 6.1 dtex; thus it does not disclose high strength microfibers. Further, no teaching or motivations either available or pin pointed by the opponent in WO2006/060835 so that it can be combined with other cited documents.

It is clear that three features of the present invention as claimed in the instant application is not fairly described in the submitted documents which are relied for taking decision. The features are high-tenacity cellulosic regenerated fibre with an individual fibre titre T between 0.6 and 0.9 dtex, tenacity (Bc) \geq 34.5 cN/tex in the conditioned state and wet modulus (Bm) with an elongation at 5% \geq 5.6 cN/tex. I have shown earlier that the applicant's invention is substantial improvement. One has to think why so many patents have been granted on the same technology? Because those are improvements of earlier technology in the same field. Different citations produced by the opponent although related to same technical field but certainly not to the improvement of providing a high-tenacity cellulosic regenerated fibre with an individual fibre titre T between 0.6 and 0.9 dtex, tenacity (Bc) \geq 34.5 cN/tex in the conditioned state and wet modulus (Bm) with an elongation at 5% \geq 5.6 cN/tex as claimed by the applicant.

In view of the same, I have formed the opinion that Opponents have failed to prove this ground on 25(1)(e). Therefore the opposition ground of Obviousness under Section 25(1)(e) is dismissed.

Insufficiency (U/S. 25(1)(g)):

The Opponent submitted that the Opposed Application does not sufficiently and fairly describe the invention in a manner to enable a person skilled in the art to perform or work the invention. However, it has been observed that paragraph 2-3, page 8 of the complete specification discloses all the features of claim 1. Further, regarding process parameters paragraph 4, page 8 of the complete specification discloses that "*the fibre of the invention can be prepared analogously to the process described in AT287905 method. However, the spinning parameters such as the spinning mass output per jet hole and the draw-off speed must be adapted in accordance with desired individual fibre titer. Surprisingly, it has been shown that the tenacity and modulus of the fibres in accordance with the invention are considerably higher than was to be expected from the details given in the AT 287905*". Furthermore, the instant application claimed a fibre, yarn and planner textile structure. The opponent submitted that in WO2006/060835 details of the raw material and various process conditions required to manufacture the fibers are mentioned, whereas the instant application

lacks on mentioning such details. However, it has been observed that the instant application refers to AT287905 for such process details.

Regarding 'conditioned state' in my opinion it is has to be as per standard. Example section of the instant application discloses that they followed 'BISFA (The International Bureau For The Standardisation of Man-Made Fibres) regulations'.

I have gone through the specification and formed the opinion that applicant have explained the invention in accordance with the provisions of Patents and Rules. The essential part of the invention is clearly and unambiguously disclosed in the present specification and that a person skilled in the art can implement the claimed inventions based on the disclosures of the present application in combination with ordinary knowledge in the art. Therefore, the complete specification of the present invention sufficiently and clearly describes the invention.

Therefore the opposition ground of insufficiency of disclosure Under Section 25(1)(g) is dismissed.

14.3 I have heard in length from learned agents for the opponent and due consideration has given to all matters submitted to me and my own analysis on all documents before me and relying on the Patent Act and Rules and further relying on the important case laws, I am of considered opinion that the opponent failed to establish a valid ground for opposition u/s 25(1). Therefore, as per Rule 55(5) of Patents Rules 2003, I hereby reject the representation made by the opponent u/s 25(1) of The Act.

DECISION

[U/S 15 of The Patents (Amendment) Act, 2005]

**In the matter of The Patents Act, 1970 as amended by the Patents
(Amendment) Act, 2005**

AND

In the matter of the Patents Rules, 2003 (as amended)

AND

**In the matter of the Application No. 4697/DELNP/2010 dated
29/06/2010**

Applicant: LENZING AG, of WERKSTRASSE 2, A-4860 LENZING, AUSTRIA

Application Details	
Application Number	4697/DELNP/2010
Type of Application	PCT National Phase Application
Date of Filing	29/06/2010
Name of The Applicant	LENZING AG
Title of Invention	MICROFIBER
Field of Invention	Textile
E-mail (as per record)	remfry-sagar@remfry.com
Publication Date (U/S 11A)	11/11/2011
Request for Examination Date	29/11/2011
First Examination Report (FER) Date	05/05/2017
Reply to FER Date	30/10/2017

1. **LENZING AG**, as an applicant, applied for Patent in The Patent Office, India on 29/06/2010 by filing an application for Patent bearing no. 4697/DELNP/2010 relating to “**MICROFIBER**”. The instant application was filed through the Agent M/S. REMFRY & SAGAR.
2. Under the provisions of Section 11(A) of the Patents Act, 1970 the instant application was published on 11/11/2011 in the Patent Journal Number 45/2011. A request for examination (Form-18) was filed by the applicant on 29/11/2011.
3. The claims in the statement of claims in applicant’s complete specification were originally filed on 29/06/2010. Claim 1 was drafted as independent claim and claims 2-12 were directly or indirectly dependent on claim 1.
4. As per procedure laid down under Section 12 and 13 of the Patents Act, 1970 the application was examined and the First Examination Report (hereafter referred to as the FER) was issued and informed to the applicant to meet the requirements of FER. FER was forwarded to the applicant’s agent on 05/05/2017.
5. In response to the FER, applicant’s agent submitted reply to the said FER on 30/10/2017. The claims filed initially were maintained. Total number of claims was 12. It may be noted that claim 1 dated 30/10/2017 is not identical with claim 1 dated 29/06/2010. Claims 2-12 were directly or indirectly dependent on claim 1. Further, a formal request on Form 30 along with

prescribed official fee, for rectification of clerical error in claim 1, under Section 78(2) of the Patents Act, 1970 was filed by the applicant on 11/08/2020. Claims 2-12 were directly or indirectly dependent on claim 1. It is clear from the marked up copy of claims filed on 11/08/2020 that while filing response to the first examination report “0.9” was inadvertently been omitted from claim 1 of the subject application. Hence, request for rectification of clerical error is allowed. Further, a Form 13 was filed on 18/07/2022 to amend the claims by way of correction and explanation in order to ascertain and describe the invention better. The value of tenacity (Bc) and wet modulus (Bm) in claim 1 were further modified. As the value restricts the scope of the claim 1 and supports of amendments are there in description; hence this amendment in claim 1 is allowed. Claims 2-12 were directly or indirectly dependent on claim 1. Amendments made on 18/07/2022 in dependents claims also do not alter the scope of the claimed subject matter. Hence Form 13 dated 18/07/2022 is allowed.

6. Regarding novelty objection GB362460A discloses a high-tenacity cellulosic regenerated fibre with an individual fibre titre T between 0.67 and 0.89 dtex (0.6-0.8 denier). It also discloses about maximum dry tenacity of 3-4 gpd (i.e. 26.54- 35.40 cN/tex) and wet tenacity of 1.5-2 gpd (i.e.13.27-17.7 cN/tex). However D1 does not explicitly disclose that tenacity value was measured in the conditioned state. Further, GB362460A fails to explicitly disclose both the characterizing features of claim 1 of the instant application i.e. a tenacity (Bc) \geq 34.5 cN/tex in the conditioned state and a wet modulus (Bm) with an elongation at 5% \geq 5.6 cN/tex. Hence, GB362460A fails to explicitly disclose all the features of claim 1 of the instant application. Detailed analysis is made in pregrant section. Therefore novelty is acknowledged.
7. Regarding inventive step objection, it is clear that three features of the present invention as claimed in the instant application is not fairly described in the cited documents In FER (GB362460A, JP3933201B2, US3539678A and FR2764910B1). The features are high-tenacity cellulosic regenerated fibre with an individual fibre titre T between 0.6 and 0.9 dtex, tenacity (Bc) \geq 34.5 cN/tex in the conditioned state and wet modulus (Bm) with an elongation at 5% \geq 5.6 cN/tex. I have shown earlier in pregrant section that the applicant's invention is substantial improvement. Different citations produced in FER although related to same technical field but certainly not to the improvement of providing a high-tenacity cellulosic regenerated fibre with an individual fibre titre T between 0.6 and 0.9 dtex, tenacity (Bc) \geq 34.5 cN/tex in the conditioned state and wet modulus (Bm) with an elongation at 5% \geq 5.6 cN/tex as claimed by the applicant. Thus inventive step is acknowledged. Hence the instant application satisfies the requirement of inventive step too.

8. After having considered the amended claims 1 to 12 dated 18/07/2022, complete specification, and in view of the submissions, all the requirements of FER are considered met. Therefore, it is hereby decided to grant the patent application No. 4697/DELNP/2010 with amended claims 1 to 12 (filed on 18/07/2022).

Dated: 31/03/2023

(Dr. Arun Kumar Pradhan)
Assistant Controller of Patents & Designs
The Patent Office, Kolkata

Copy to:

1. M/s. REMFRY & SAGAR
ATTORNEYS-AT-LAW REMFRY HOUSE
MILLENNIUM
PLAZA SECTOR 27, GURGAON-122 002,
INDIA
2. M/S. OBHAN & ASSOCIATES
N - 94, Second Floor, Block N, Panchsheel Park,
New Delhi, Delhi 110017