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* **IN THE HIGH COURT OF DELHI AT NEW DELHI**

Reserved on 9th May, 2022

Date of decision: 5th July, 2022.

\+ **C.A.(COMM.IPD-PAT) 11/2022**

NIPPON A&L INC. ..... Appellant

Through: Mr. Jogeshwar Mishra and Ms. Sahay Advocates. (M:9717892432)

versus

THE CONTROLLER OF PATENTS ..... Respondent

Through: Mr. Harish V. Shankar, CGSC with Ms. S. Bushra Kazim, Ms. Mehlawat Sagar and Mr. Srish Kumar Mishra, Advocates for UOI. (M:9810788606)

CORAM:
JUSTICE PRATHIBA M. SINGH

JUDGMENT

Prathiba M. Singh, J.

1. This pronouncement has been done through hybrid conferencing.

Background

2. The present appeal challenges the impugned order dated 15th March, 2021 passed under section 15 of the Patents Act, 1970 *(hereinafter 'Act')*. Vide the impugned order, the Appellant's application for the grant of patent has been rejected by the Deputy Controller of Patents.

3. The Appellant/Applicant- Nippon A&L Inc. *(hereinafter "Appellant")* had filed a patent application in Japan bearing no. 2013153727 seeking patent protection for a *"copolymer latex"* product and process on 24th July, 2013. Thereafter, application bearing no. 201617003704 dated 2nd February, 2016 was filed as the Indian national phase entry of international application PCT/JP2014/069608. A request for examination of Appellant's application was filed on 15th March, 2017. The said application was

examined and First Examination Report (FER) was issued on 22nd November, 2019. In the FER, objections relating to inventive step under Section 2(1) (ja) of the Act, non-patentability under Sections 3(d) & 3(e) of the Act were raised by the Patent Office. The Patent Office further raised an objection that the scope for which protection was sought was not clear from the wording of the claims.

4. A response to the FER dated 18th May, 2020 was submitted by the Appellant along with an amended set of claims. It was contended by the Appellant in its response that the invention in question cannot be conceived from the prior art. It was also argued that objections under Sections 3(d) and 3(e) of the Act were not attracted. The Respondent on 18th September, 2020 issued a hearing notice under section 14 of the Act. One of the objections taken in the hearing notice was that claims 1, 2, 4 and 6 were not properly drafted and the scope for which protection was sought was not clear. Therefore, the applicant was asked to redraft the claims. Objections under Sections 2(1)(j), 2(1)(ja), 3(d), 3(e) of the Act were also raised in the hearing notice.

5. The hearing took place on 11th January, 2021. In the hearing, Appellant's Agent appeared and detailed oral submissions were stated to have been made on the objections raised in the hearing notice. The Appellant also proposed amending the claims, which were previously defined in *'product by process'* format characterised by features of both the product and the process, to *'process only'* claims to render the claims clearer and more definite. On 24th January, 2021, Appellant's Agent filed written submissions encapsulating the oral arguments along with a fresh set of amended claims. The original set of claims and the final amended set of

claims as filed on 24th January, 2021 are set out below:

Claim No.	Claim as originally filed on 2nd February, 2016	Claim as amended on 24th January, 2021
Claim 1	***A copolymer latex being obtained by emulsion polymerization,*** wherein the copolymer comprises monomer components comprising: 15 to 60% by mass of (a) an aliphatic conjugated dienic monomer; *5* to 35% by mass of (b) an ethylenic unsaturated carboxylic acid monomer; 5 to 30% by mass of (c) a vinyl cyanide monomer; and 0 to 75% by mass of (d) a monomer copolymerizable therewith, and ***wherein*** the emulsion polymerization is carried out by not charging a whole amount of the (c) vinyl cyanide monomer until a reaching time when a polymer conversion rate of the reaction system has reached 1.0%, and charging 80% by mass or larger of the whole amount of the (c) vinyl cyanide monomer by a time point of 60% of time from the reaching time until a completing time when charging of a whole amount of the monomer components has been completed, at the latest.	***A method of emulsion polymerization for obtaining a copolymer latex,*** wherein the copolymer comprises monomer components comprising: 15 to 60% by mass of (a) an aliphatic conjugated dienic monomer; 5 to 35% by mass of (b) an ethylenic unsaturated carboxylic acid monomer; 5 to 30% by mass of (c) a vinyl cyanide monomer; and 0 to 75% by mass of (d) a monomer copolymerizable therewith, the emulsion polymerization ***being*** carried out by not charging a whole amount of the (c) vinyl cyanide monomer until a reaching time when a polymer conversion rate of the reaction system has reached 1.0%, and charging 80% by mass or larger of the whole amount of the (c) vinyl cyanide monomer by a time point of 60% of time from the reaching time until a completing time when charging of a whole amount of the monomer components has been completed, at the latest.
Claim 2	The ***copolymer latex*** according to claim 1, wherein the emulsion polymerization is carried out by incorporating larger than 0% by mass and 40% by mass or smaller of a whole amount of the (b) ethylenic unsaturated carboxylic acid monomer in the reaction system at a charging-starting time of a polymerization initiator, and	The ***method*** as claimed in claim 1, wherein the emulsion polymerization is carried out by incorporating larger than 0% by mass and 40% by mass or smaller of a whole amount of the (b) ethylenic unsaturated carboxylic acid monomer in the reaction system at a charging-starting time of a polymerization initiator, and starting addition of the rest of the (b)

	starting addition of the rest of the (b) ethylenic unsaturated carboxylic acid monomer from a time point of 5% of time from the reaching time until the completing time, at the soonest, and charging 92% by mass or larger of the whole amount of the (b) ethylenic unsaturated carboxylic acid monomer by a time point of 80% of time from the reaching time until the completing time, at the latest.	ethylenic unsaturated carboxylic acid monomer from a time point of 5% of time from the reaching time until the completing time, at the soonest, and charging 92% by mass or larger of the whole amount of the (b) ethylenic unsaturated carboxylic acid monomer by a time point of 80% of time from the reaching time until the completing time, at the latest.
Claim 3	The ***copolymer latex*** according to claim 1 or 2, wherein a ratio of a tensile stress at break of a latex film of 0.3 to 0.5 mm in thickness fabricated using the copolymer latex to a tensile stress thereof at 100% elongation (tensile stress at break / tensile stress at 100% elongation) is lower than 3.5; and an elongation at break of the latex film exceeds 300%.	The ***method*** as claimed in claim 1 or 2, wherein a ratio of a tensile stress at break of a latex film of 0.3 to 0.5 mm in thickness fabricated using the copolymer latex to a tensile stress thereof at 100% elongation (tensile stress at break / tensile stress at 100% elongation) is lower than 3.5; and an elongation at break of the latex film exceeds 300%.
Claim 4	A ***copolymer latex being obtained by*** emulsion polymerization, wherein the copolymer comprises monomer components comprising: 15 to 60% by mass of (a) an aliphatic conjugated dienic monomer; 6.5 to 35% by mass of (b) an ethylenic unsaturated carboxylic acid monomer; 1 to 30% by mass of (c) a vinyl cyanide monomer, and 0 to 77.5% by mass of (d) a monomer copolymerizable therewith, and wherein a difference between a moisture percentage of a latex film of 0.3 to 0.5 mm in thickness and of a 4 cm-side square fabricated using the copolymer latex as humidity-conditioned in an	A ***method of*** emulsion polymerization ***for obtaining a copolymer latex,*** wherein the copolymer comprises monomer components comprising: 15 to 60% by mass of (a) an aliphatic conjugated dienic monomer; 6.5 to 35% by mass of (b) an ethylenic unsaturated carboxylic acid monomer; 1 to 30% by mass of (c) a vinyl cyanide monomer, and 0 to 77.5% by mass of (d) a monomer copolymerizable therewith, wherein a difference between a moisture percentage of a latex film of 0.3 to 0.5 mm in thickness and of a 4 cm-side square fabricated using the copolymer latex as humidity-conditioned in an atmosphere of 23°C and 50%RH for 2 days and a moisture percentage of the latex film as dried

	atmosphere of 23°C and 50%RH for 2 days and a moisture percentage of the latex film as dried in a desiccator installed with drying silica gel for 2 days is 3.0% by mass or lower; and a viscosity of the copolymer latex as regulated at a solid content concentration of 50.0% by mass with pure water being used as a disperse medium, a pH of 6.5 and a liquid temperature of 25°C is 1000 mPa·s or lower.	in a desiccator installed with drying silica gel for 2 days is 3.0% by mass or lower; and a viscosity of the copolymer latex as regulated at a solid content concentration of 50.0% by mass with pure water being used as a disperse medium, a pH of 6.5 and a liquid temperature of 25°C is 1000 mPa·s or lower; ***and*** ***the emulsion polymerization being carried out by not charging a whole amount of the (c) vinyl cyanide monomer until a reaching time when a polymer conversion rate of the reaction system has reached 1.0%, and*** ***charging 80% by mass or larger of the whole amount of the (c) vinyl cyanide monomer by a time point of 60% of time from the reaching time until a completing time when charging of a whole amount of the monomer components has been completed, at the latest.***
Claim 5	The ***copolymer latex according to*** claim 4, wherein the (b) ethylenic unsaturated carboxylic acid monomer comprises 50% by mass or more of an ethylenic unsaturated monocarboxylic acid monomer.	The ***method as claimed in*** claim 4, wherein the (b) ethylenic unsaturated carboxylic acid monomer comprises 50% by mass or more of an ethylenic unsaturated monocarboxylic acid monomer.
Claim 6	The copolymer latex according to claim 4 or 5, wherein the emulsion polymerization is carried out by not charging a whole amount of the (c) vinyl cyanide monomer until a reaching time when a polymer conversion rate of the reaction system has reached 1.0%, and charging 80% by mass or larger of the whole amount of the (c) vinyl cyanide monomer by a time point of 60% of time from the reaching time until a completing time when charging of a whole amount of the	{OMITTED}

	monomer components has been completed, at the latest.	
Claim 7	The ***copolymer latex according to any one of claims 4 to 6,*** wherein the emulsion polymerization is carried out by incorporating larger than 0% by mass and 40% by mass or smaller of a whole amount of the (b) ethylenic unsaturated carboxylic acid monomer in the reaction system at a charging-starting time of a polymerization initiator, and starting addition of the rest of the (b) ethylenic unsaturated carboxylic acid monomer from a time point of 5% of time from a reaching time when a polymer conversion rate of the reaction system has reached 1.0% until a completing time when charging of the whole amount of the monomer components has been completed, at the soonest, and charging 92% by mass or larger of the whole amount of the (b) ethylenic unsaturated carboxylic acid monomer by a time point of 80% of time from the reaching time until the completing time, at the latest.	The ***method as claimed in claim 4 or 5,*** wherein the emulsion polymerization is carried out by incorporating larger than 0% by mass and 40% by mass or smaller of a whole amount of the (b) ethylenic unsaturated carboxylic acid monomer in the reaction system at a charging-starting time of a polymerization initiator, and starting addition of the rest of the (b) ethylenic unsaturated carboxylic acid monomer from a time point of 5% of time from a reaching time when a polymer conversion rate of the reaction system has reached 1.0% until a completing time when charging of the whole amount of the monomer components has been completed, at the soonest, and charging 92% by mass or larger of the whole amount of the (b) ethylenic unsaturated carboxylic acid monomer by a time point of 80% of time from the reaching time until the completing time, at the latest.

6. In the written submissions, it was contended by the Appellant that it seeks to amend claims by way of explanation to improve clarity and definitiveness. It was further claimed by the Appellant that the amended claims were in complete compliance with the provisions of Sections 57(6), 59(1), and 10(4)(c) of the Act. After hearing the Applicant and reviewing the written note of arguments, the patent application of the Appellant was rejected by the Deputy Controller of Patents primarily on two grounds:

i. That the new set of claims was beyond the scope of the original claims. The original claims were 'product claims' relating to 'copolymer latex' which were now sought to be amended/converted by the Appellant to 'method/process' claims. The amendment from *'product claims'* to *'process claims'* was not supported by the description.

ii. The Controller also held that the amended claims are lacking inventive step.

7. Since the amended claims were held to be not allowable under section 59(1) of the Act, the Deputy Controller did not deal with the objections of non-patentability under Sections 3(d), and 3(e) of the Act in detail. Thus, the application of the Appellant came to be rejected by the Controller vide the impugned order. It is this order dated 15th March, 2021 which is under challenge in the present appeal.

Submissions

8. Mr. Jogeshwar Mishra, ld. counsel appearing for the Appellant submits that the original claims which were drafted were *'product by process'* claims. After objections were raised by the Patent Office in the hearing notice, the claims were restricted to method claims, i.e., process claims. This amendment cannot be held to be beyond the scope of the original claims as the original claims contained both, product as also process claims. By restricting the claims to the process, the Appellant has given up a significant part of the claims itself and it could not be held to be hit by Section 59 of the Act.

9. In order to buttress his submission, ld. counsel has taken the Court through the original claims as also through the marked-up claims reflecting the amendments, to show that the *'product by process'* claims were redrafted into *'process'* claims. Ld. counsel relies upon Article 123 of the European Patent Convention, 1973 *(hereinafter 'EPC')* and the decision of the European Board of Appeals in ***Konica/Sensitizing [1994] EPOR 142*** to argue that whenever product by process claims are amended and the applicant restricts the claims to only the process, the said amendment can be allowed in terms of Article 123 of EPC. He also relies upon the decision of the Asst. Controller of Patents, Patent Office, Kolkata in ***Antacor Ltd. & Schweiger, Martin*** dated 18th July, 2017. As per the said decision, the amendment of *'product by process'* claims to *'process only'* claims, under similar circumstances, for making the claims clearer and more definite was held to be permissible. Ld. Counsel for the Appellant also relies upon the decision in ***The Polymer Corporation's Patent [1972] RPC 39*** to argue that amendments by way of an explanation, which turn ambiguous claims to clearer claims, ought to be permitted.

10. Mr. Harish V. Shankar, ld. CGSC appearing for the Respondent has made a two-fold submission before this Court. His first argument is that product by process claims are primarily product claims and are tested for novelty and inventive step *qua* the product and not the process. The core of the claim in a product by process patent would only be the product. The Appellant, by removing the product related claims and converting them into process claims, is changing the very nature of the claims which is impermissible. Thus, the same ought not to be allowed. He relies upon the decision of the IPAB in ***Research Foundation of State University of New***

York in OA/11/2009/PT/DEL dated 10th August, 2012 to place before the Court the nature of product by process claims and the manner in which they are examined. The relevant portion of the same is as under:

> *"42. In view of above judgment, we also feel that product-by-process claims must also define a novel and unobvious product, and that its patentability cannot depend on the novelty and unobviousness of the process limitations alone. Therefore, the patentability of a product by process claim is based on the product itself if it does not depend on the method of production. In other words, if the product-by-process claim is the same as or obvious from a prior product, the claim is un-patentable even if the prior art product was made by a different process. Accordingly, the product by process claim must define a novel and un-obvious product and the patentability in such claim cannot depend on the novelty and un-obviousness of the process limitation alone."*

11. As per his submission, similar is the approach of the Patent Office as contained in the ***Guidelines of Examination of Patent Applications in the Field of Pharmaceutical (October, 2014)*** *(hereinafter "Guidelines").* Reliance is placed upon paragraph 7.9 of the said Guidelines. The same is extracted below:

> ***"7.9 Product-by-process claims:***
>
> *A claim to a product obtained or produced by a process is anticipated by any prior disclosure of that particular product per se, regardless of its method of production. In a product-by-process claim, by using only process terms, the applicant seeks rights to a product, not a process. The IPAB held in ORDER No. 200/2012 ".....product-by-process claims must also define a novel and*

> *unobvious product, and that its patentability cannot depend on the novelty and unobviousness of the process limitations alone. Therefore, the patentability of a product by process claim is based on the product itself if it does not depend on the method of production. In other words, if the product-by-process claim is the same as or obvious from a prior product, the claim is un-patentable even if the prior art product was made by a different process. Accordingly the product by process claim must define a novel and un-obvious product and the patentability in such claim cannot depend on the novelty and un-obviousness of the process limitation alone"*
>
> *Therefore, in product-by-process claims, the applicant has to show that the product defined in process terms, is not anticipated or rendered obvious by any prior art product. In other words the product must qualify for novelty and inventive step irrespective of the novelty or inventive step of the process.*"

12. It is his submission that when a *'product by process'* claim is deemed to be in effect a *'product'* claim, the conversion of a product claim to process claims is impermissible under Section 59 of the Act. Thus, he submits that the present application has been rightly disallowed by the Patent Office.

13. His second argument, without prejudice to the first argument, is that the original claims as filed by the Appellant were not actually *'product by process'* claims and they were merely *'product'* claims. He makes reference to the claims as originally filed. It is his submission that the focus of the claims as originally filed was only a product, namely, 'copolymer latex'. The novelty and inventive step by the Appellant were claimed only in the

product and not in the process. In the originally filed claims there are no details about the process in which exclusivity is claimed. As per the submission of the ld. CGSC, the Appellant is trying to convert *'product'* claims to *'product by process'* claims and then convert the *'product by process'* claims to *'process'* claims. Thus, in essence, the Appellant is trying to convert a *'product patent'* into a *'process patent'* which is not permissible in view of the legislative scheme of the Patent Act, 1970. The Appellant is merely using jugglery of words in order to change the scope of the claims itself which is impermissible. He submits that when a patent for a product is sought, then it is characterized by product features and in case of process claims, process steps and parameters are set out to define the scope of claims. In the present case, initially filed claims define a product but amended claims are mildly modified to convert them into an alleged method of preparing 'copolymer latex'.

14. The ld. CGSC submits that the complete specification does not show any novelty in the process. Since the original claims were for a product, the process was not claimed. Therefore, it ought to be read to have been disclaimed. Furthermore, the claims and the specification essentially describe the product, the Appellant has chosen not to give the 'state of the art' in the process anywhere in the specification. He relies upon the ***Report on the Revision of the Patents Law (1959)*** by ***J. N. Rajagopala Ayyangar*** *(hereinafter "Justice Ayyangar Committee Report")* to argue that the scope of claims cannot be changed vide an amendment. At best errors can be corrected, if the claims as originally framed were not properly made or formulated. The claims after the amendment should fairly fall within the claims before the amendment and if any content of the specification has not

been claimed it has to be read as having been disclaimed.

15. He, further, refers to the judgments relied upon by the Appellant being ***The Polymer Corporation's Patent (supra)*** and ***Konica (supra).*** It is his submission that in both these cases, the original claims also contained process claims; thus, deletion of the product claims would not have had an impact in the said two cases. He, however, concedes that in Indian Patent Application No. 2712/KOLNP/2009 of ***Antacor Ltd. & Schweiger, Martin*** the product claims, which were originally 72 in number, were permitted to be amended to 13 process claims. This, according to him, however, was contrary to law. He, finally, places reliance on the judgment in ***Tony Mon George v. Controller General of Patents, Designs & Trademarks and Ors., OA/48/2020/PT/DEL*** in support of the above submissions. He, further, submits that the language in the specification cannot be used to change the claims of the patent from one subject matter to another.

16. Mr. Mishra, ld. counsel for the Appellant in his rejoinder arguments submits that since the Appellant is no longer claiming a patent for the product, the propositions which are canvassed by the Respondent would not be relevant in the present case. He submits that the manner in which product by process claims are examined is by testing the product claims on novelty and inventive step criteria. However, in the present case, since the claims have been restricted to process claims only, the only thing that needs to be seen is whether the amended claims fall within the overall scope of the specification and the original claims. Thus, the proposition mooted by the Respondent that *'product by process'* claims cannot be converted into *'process only'* claims as the same is not allowed is devoid of merit and has no basis in the scheme of the Act.

17. Ld. counsel for the Appellant has taken the Court through the complete specification filed in the present case to explain that the process for which the patent is currently being sought was described in complete detail in the specification. He relies upon the 'state of the art' as described in paragraphs 2 to 4 of the complete specification. In the complete specification, paragraph 6 onwards, the Applicant seeks to explain the technical problem. Paragraph 12 onwards, according to the ld. counsel, the entire process of conducting 'emulsion polymerisation in a sequential charging manner' has been explained as the solution to the technical problem. He submits that the invention in question has two aspects and both the aspects have been covered in the patent specification by giving details of different embodiments. Although the embodiments are contained in the complete specification, the claim itself is not being restricted to the said embodiments. It is his argument that unless and until the novelty or inventive step *qua* the 'sequential charging steps' is in some way tried to be shown as being not novel or non-inventive, the Applicant should be entitled to claim exclusivity in respect of the product and the process itself. He submits that at this stage, novelty and inventive step issue has not been gone into by the Patent Office, which has rejected the application on the mere ground that the scope of the patent is being changed by conversion of *'product claims'* to *'process claims'*.

18. The ld. Counsel again places reliance on ***Konica (supra)*** to show to the Court the original claims and the amended claims in dispute in the said case. He submits that the said decision is a clear authority on the proposition that a *'product by process'* claim can be restricted to a *'process only'* claim, which in effect reduces the scope of monopoly of the patentee. Even if the

originally filed claims were granted, as they were, he submits that the product would have been limited by the process as described in claim 1. He, thus, submits that the amendment ought to be allowed and the Patent Office ought to be directed to consider the application in respect of novelty and inventive step and any other objections that the Patent Office may raise.

Analysis and findings

19. Heard. A perusal of the complete specification, as filed, shows that the invention relates to an advanced copolymer latex. The 'Background Art' describes the manner in which the copolymer latex is used for various purposes including printed material, direct mails and merchandise catalogues, etc. The 'Background Art' also describes synthetic emulsion and natural binders as also the application of synthetic emulsion binders represented by styrene-butadine based copolymer latexes in paper coating compositions. The 'Technical Problem' has been explained by highlighting the requirement for reduction of the costs in the manufacturing of copolymer latex while at the same time not compromising on the performance including reduction in viscosity, increase in adhesive strength, lesser use of coating material, etc. There are two aspects of the invention in question. As per the Appellant, the purpose of the first aspect of the invention is to develop a copolymer latex with sufficient adhesive strength, less viscosity, which is good in the operability in coated paper fabrication and for use in batteries as electrode active substance.

20. The second aspect of the invention is to increase the adhesive strength for coated paper products not only in dry conditions but also in moist conditions. The specification provides various solutions to the Technical

Problem and the characteristics which a copolymer latex should contain in order to achieve the above objectives. Paragraphs 12 to 15 of the section 'Solution to Problem' describe the first aspect of the invention, enumerate its features, and the process of obtaining it. Whereas, paragraphs 16 to 20 of the specification describe the second aspect of the invention, its advantages, and the steps involved in the process of obtaining it. The said process has been explicitly spelt out in detail in paragraphs 16 and 19 of the complete specification. These paragraphs contain various unique elements which the copolymer latex should have, as per the Appellant, including the manner in which the following steps are to be carried out:

i) Emulsion polymerization to be carried out in a particular manner;

ii) Ratio of tensile stress, elongation, etc.

21. The Appellant describes that any copolymer latex which satisfies the conditions *qua* the first aspect would have the following properties:

> *"....When the copolymer latex satisfies the above condition, there can be more improved the adhesive strength, the operability in coated paper fabrication, and the coverability to an electrode active substance of the copolymer latex."*

22. Copolymer latex which satisfies the conditions as laid down in the specification *qua* the second aspect would have the following properties:

> *"Further the second aspect of the present invention can provide a copolymer latex which can develop a sufficient adhesive strength in a both of the dry time and the moist time, and which is good in the operability in coated paper fabrication, and the coverability to an electrode active substance."*

23. In the 'Description of Embodiments' further detailed steps have been given on both the first aspect and the second aspect and the manner in which the emulsion polymerization is to be carried out. The specification also gives several examples for achieving the purpose of the invention.

Claims as filed

24. The claims as originally filed related to a copolymer latex obtained by emulsion polymerization which contained various components as explained in the specification. Claim 1 initially gives the characteristic features of the copolymer latex and the brief manner in which the process is to be carried out. The dependent claims, as filed, then expanded on the various steps further. Clearly, the unamended claims were *'product by process'* claims wherein the invention was defined by a product possessing various characteristics and manufactured using a specific process. Thus, both the product and the process were captured in the claims as filed originally. This patent is stated to have corresponding patents in other jurisdictions as well.

25. The FER dated 22nd November, 2019 issued by the Patent Office raised objections as to inventive step under Section 2(1)(ja) and non-patentability under Sections 3(d) and 3(e) of the Act. Claims 1 to 7 of the application in question were found to be obvious in view of teachings of cited documents under reference D1, D2, D3, and D4. On the point of non-patentability, the objection of the Patent Office was that the subject matter of the claims was nothing but a mere use of known composition and preparation of copolymer latex without employing any new reactant. The said objection reads as under:

> *"The subject-matter of claims 1-7 falls within scope of Section 3(d) of the Act, what is claimed in claims 1-7 is nothing but a mere use of known composition and preparation of copolymer latex (comprising of conjugated diene monomer, ethylenically unsaturated carboxylic acid monomer and Vinyl cyanide monomer) repeating without employing any new reactant and therefore, the subject-matter of said claims also falls within the scope of Section 3(d) of the Act."*

26. Another miscellaneous objection was also raised that the scope for which protection is sought is not clear. The same objection is extracted below:

> *The word "according to" in claims 2-3 and 5-7 is not definitive; it requires amendment by replacing word "as claimed in claim".*
> *Claims are not clear wrt term "or more".*
> ***Scope for which protection has been sought for product or for process is not clear from wording "obtained by emulsion polymerization…" as used in claim 1, 4. Similarly claims 6 and 7 are also not clear wrt the wording "the emulsion polymerization is carried out…".***

27. A perusal of the above objection shows that the Patent Office wanted clarity as to whether the scope for which the protection is sought is for a product or for a process.

28. In response to this FER, the Appellant filed its reply on 18th May, 2020 wherein it broadly stated as under:

i) Without prejudice to the already submitted claims, the Appellant submitted an amended set of claims;

ii) The objection as to lack of clarity in terms of the scope of protection being sought was sought to be overcome by arguing

that the scope of claim is sufficiently clear. It was pointed out by the Appellant that the scope of protection would be determined as per the limitations of the claims, which are clearly recited.

iii) Objection as to lack of inventive step was dealt by the Appellant by providing data to prove that even if the compositions are identical, the properties/effects of the copolymer latex obtained from the addition procedure differ greatly.

iv) Objection under Sections 3(d) and 3(e) of the Act were also dealt with in the said response. It was argued that Section 3(d) objection would not be applicable as the claims were novel and a novel product/process cannot be considered to be known as to attract the provisions of section 3(d) of the Act. Objection under Section 3(e) was responded to on the ground that the copolymer latex had distinct synergistic properties of its own and it is not simply an aggregate of individual properties of discrete components.

29. A second office action was issued on 18th September, 2020 in which the objection under Section 2(1)(j), lack of inventive step, claims being hit by Sections 3(d) and 3(e) of the Act and other objections were again raised by the Patent Office. The hearing *qua* the Appellant's patent application was fixed on 19th October, 2020. However, on 15th October, 2020 an adjournment was sought by the Appellant. Thereafter, vide hearing notice dated 4th December, 2020, the hearing was fixed on 11th January, 2021. The objections raised in the previous hearing notice dated 18th September, 2020

were reiterated, the relevant part of which reads as under:

> *"1. Scope for which protection has been sought, is not clear. Claim 1 starts with "A copolymer latex being obtained .... ".* ***Claim1 is not clear wrt term "obtained": this is a process feature, whereas claim 1 claims "product". So redraft claims properly.*** *Same objection is also applicable for claim 4.*
> ***Claim 2 is also not clear. this claim define about "emulsion polymerization", which is also a process, so said claims is also not allowable.*** *same objection is also applicable for claim 6."*

30. Hearing regarding the application in question took place. After hearing the Agent of the Appellant, the ld. Deputy Controller was of the view that the main issue that still persisted was the objection regarding the scope of the claims. During the hearing, the Agent of the Appellant agreed to amend the claims to overcome the objection as to the scope of claims. A further amended set of claims were filed along with the written submission dated 24th January, 2021 which are the subject matter of the present appeal. In this amended set of claims, the Appellant converted all the claims into *'method/ process'* claims. The ld. Deputy Controller after considering the oral submissions and the written note of arguments filed by the Agent, rejected the patent application of the Appellant vide the impugned order dated 15th March, 2021.

The impugned order

31. The Deputy Controller of Patents in the impugned order held that the main issue which is still outstanding is the objection regarding scope of claims. As per the impugned order, the Appellant converted all *'copolymer*

latex' claims to *'method of emulsion polymerization'*, however, the method of emulsion polymerization was not present in the originally filed claims. The relevant portion of the order reads as under:

> *"8. Here it is to be noted that the complete specification initially filed with 7 claims, all claims directed to copolymer latex. At the time of filing written note of arguments, the Agent of the applicant amended the claims and converted all "copolymer latex" claims to "Method of emulsion polymerization" claims which were not present at the -time of filing the instant application."*

32. After holding so, the ld. Deputy Controller consolidated the issues as under:

> *"9. Now I would like to consolidate the issues as following:*
> *The main issues in the hearing concerning the validity of the patent are:*
> *(I) Whether amendment of claims are allowable which were not claimed at the time of filing under section 59(1) of the Act or not.*
> *(II) Whether the claims are lacking in inventive step over the prior art document as cited in hearing letter dated 11/01/ 2021 or not.*
> *(III) Whether the claims fall under mischief of section 3(d), 3(e) or not?"*

33. The findings of the Deputy Controller on the issues framed are as under:

- The question is whether the copolymer latex claim i.e., a product claim, can be converted to a method claim. At the time when the patent application was filed, not even a single method claim was there. Since the 'copolymer latex' claims have been changed to 'method' claims, the scope of the invention has been changed.

- The method claims are beyond the scope of the claims as originally filed and are not supported by the description;
- That which is not claimed is disclaimed. Since the method claims were not claimed at the time of filing, the said claims are disclaimed;
- As per Section 59(1) of the Act, an amendment of the claims cannot be allowed if the amended claims would not fall wholly within the scope of the claims before the amendment. The method claims are beyond the scope of the claims as originally filed; thus, the amendment is not allowable;
- The method claims disclose a method of emulsion polymerisation for obtaining copolymer latex, however, this method of emulsion polymerisation is already disclosed in the cited documents. Thus, the method claims also lack inventive step;
- The objection as to non-patentability under Sections 3(d) and 3(e) of the Act are not gone into in view of the above conclusions.

34. A reading of the impugned order broadly shows that the ld. Deputy Controller is of the opinion that the process was not claimed earlier and hence the same is beyond the scope of the claims as filed. The ld. Deputy Controller was further of the view that the process of emulsion polymerisation is a known process. Hence, there is no inventive step in the invention of the Appellant. However, on the aspect of inventive step, the discussion is very minimal as it appears that the overwhelming opinion of the ld. Deputy Controller was that the amendment would not be liable to be allowed. There is also no discussion on the objection of non-patentability under Sections 3(d) and 3(e) of the Act.

35. For the purpose of the present appeal, therefore, this Court is primarily considering whether the claims as originally filed could have been amended into method claims by the Appellant or not. As already observed above, the complete specification of the Appellant's patent application is quite detailed. The process of 'emulsion polymerisation' has been explained in the minutest form in the specification. The Appellant had filed the product claims for a 'copolymer latex' claiming the same had unique properties and it was obtained by the process as exemplified in the patent specification.

36. Due to the objections raised by the Patent Office that there was no clarity as to whether the patent was for a product or for a process, the Appellant chose to restrict the patent to the *'process'* alone. In fact, the objections raised by the Patent Office in the FER and the hearing notices themselves make it adequately clear that the patent as originally filed also had process/method claims. The language used in the objections shows that the claims as originally filed were sought for *"product or process"*. Thus, for the Patent Office to now say that there were no process claims in the original claims and that the method claims are not supported by the description would be contrary to what is stated in the FER and the subsequent objections which were raised. The objection of the Patent Office was that the there was no clarity in the application of the Appellant as to whether the monopoly was sought for a product or for a process. In the face of such an objection, the Appellant has sought to limit the claims to the method i.e., the process, to its own detriment. By so amending the claims, the Appellant loses the claim of exclusivity for the copolymer latex as a product.

37. It is common understanding in the field of patents that product claims

are much broader claims then process claims. A product claim, if granted, confers a monopoly on the patentee for the product itself, irrespective of the process by which the said product could have been made. However, in the case of a process claim, the exclusivity or the monopoly is restricted to the manner/method by which a particular product is manufactured and if the same product is manufactured or achieved through a different process/method, the exclusivity of the patentee cannot usually extend to such different process or to the product manufactured by the different process. When there are *'product by process'* claims, however, the extent of monopoly depends upon the reading of the claims in each case. In the present case, the amendment of the claims from *'product by process claims'*, wherein the copolymer latex has various features and can be manufactured by the process described in the specification, to merely the process of manufacturing the copolymer latex is clearly a step down for the patentee.

38. Chapter X of the Patent Act, 1970 deals with amendment of applications or the Specification. Section 57 of the Act empowers the Controller to allow the amendment of an application for patent or complete specification or any document related thereto subject to such conditions as the Controller thinks fit. However, this power of Controller to allow amendment of an application is subject to Section 59 of the Act. The said section reads as under:

> *"**59. Supplementary provisions as to amendment of application or specification.—**(1) No amendment of an application for a patent or a complete specification or any document relating thereto shall be made except by way of disclaimer, correction or explanation, and no amendment thereof shall be allowed, except for the purpose of incorporation of actual fact, and no amendment of a complete specification shall be allowed, the effect of which would be that the specification as amended would claim or*

describe matter not in substance disclosed or shown in the specification before the amendment, or that any claim of the specification as amended would not fall wholly within the scope of a claim of the specification before the amendment

(2) Where after the date of grant of patent any amendment of the specification or any other documents related thereto is allowed by the Controller or by the High Court, as the case may be,—

(a) the amendment shall for all purposes be deemed to form part of the specification along with other documents related thereto;

(b) the fact that the specification or any other documents related thereto has been amended shall be published as expeditiously as possible; and

(c) the right of the applicant or patentee to make amendment shall not be called in question except on the ground of fraud.

(3) In construing the specification as amended, reference may be made to the specification as originally accepted."

39. Section 59 has two aspects. Sub-section (1) deals with amendment of a pending application, its specification, claims or any document related thereto. Sub-section (2) deals with amendment after the grant of the patent. In the present case, the Court is concerned with a pending patent application so the amendment has to be tested on the conditions specified in Section 59(1) of the Act.

40. A perusal of Section 59(1) shows that an amendment of an application, specification or any document related thereto would be permissible only if the following conditions are satisfied:

(i) The amendment has to be by way of disclaimer, correction or explanation;

And

(ii) The amendment has to be for the purpose of incorporation of actual facts;

And

(iii)(a) The effect of the amendment ought not be to amend the specification to claim or describe any matter which was not disclosed in substance or shown in the originally filed specification.

And

(iii)(b) The amended claims have to fall within the scope of claims as originally filed.

41. Thus, for an amendment to be allowed all conditions have to be satisfied. Any amendment falling foul of (i), (ii), (iii)(a) or (iii)(b) above cannot be allowed.

42. Section 59(1) of the Act as it exists presently in the statute came into effect vide Patent (Amendment) Act, 2002 with effect from 20th May, 2003. Prior to the said amendment, Section 59(1) read as under:

> *"(1) No amendment of an application for a patent or a complete specification shall be made except by way of disclaimer, correction or explanation,* ***and no amendment thereof shall be allowed except for the purpose of correcting an obvious mistake,*** *and no amendment of a complete specification shall be allowed the effect of which would be that the specification as amended would claim or describe matter not in substance disclosed in the specification before the amendment, or that any claim of the specification as amended would not fall wholly within the scope of a claim of the specification before the amendment."*

43. A perusal of the provision as it existed prior to the amendment and as it exists today shows that the phrase *"except for the purpose of correcting an obvious mistake"* has been substituted to read *"except for the purpose of incorporation of actual fact"*. A reading of the unamended provision and the provision post the amendment shows that the power to amend has not been abridged or curtailed or narrowed but has been expanded.

44. The amendment in the present case of the claims is by disclaiming the product portion of the claims, in view of the objections raised by the Patent Office itself. The argument of the Respondent that the process was originally disclaimed is clearly not correct as the objection of the Patent Office itself was that there was no clarity as to whether the claim was for a product or for a process.

45. The Appellant has sought to rely upon the decision of the European Technical Board of Appeal *(hereinafter as 'Appellate Board')* in ***Konica (supra)*** dated 10th June, 1992 to argue that the amendment of *'product by process'* claims to *'process'* ought to be allowed. The said decision merits consideration as it related to a patent where the original claims and the amended claims were considered by the Appellate Board, in a similar context.

46. In ***Konica (supra)*** the Appellant's patent was granted on 12th November, 1986. Claim No.1 of Appellant's patent, as originally granted, was a *'product by process'* claim. The same is extracted below:

> *"1. A silver halide photographic emulsion having silver halide grains consisting essentially of silver chlorobromide characterised in that the silver chlorobromide has been sulfur-sensitized in the presence of a silver halide solvent but has not been*

gold-sensitized."

47. A petition was filed requesting the revocation of the Appellant's patent on the ground that the Appellant's patent lacked novelty and inventive step. During the course of the hearing before the Opposition Division, the Appellant filed an amended Claim No.1 which was a pure process claim. The same is extracted as under:

> *"Process for chemically sensitizing a silver halide photographic emulsion having silver halide grains consisting essentially of silver chlorobromide characterised by adding to the emulsion a sulphur sensitizer but not a gold sensitizer and, prior to or during chemical sensitization, a silver halide solvent."*

One of the questions raised was whether the conversion of a *'product by process'* claim, as originally filed, to a *'pure process'* claim was permissible.

48. The admissibility of amendment of patent claims in Europe is governed by Article 123 of EPC. Article 123 of EPC is as extracted below:

> *"1. The European patent application or European patent may be amended in proceedings before the European Patent Office, in accordance with the Implementing Regulations. In any event, the applicant shall be given at least one opportunity to amend the application of his own volition.*
> *2. The European patent application or European patent may not be amended in such a way that it contains subject-matter which extends beyond the content of the application as filed.*
> *3. The European patent may not be amended in such a way as to extend the protection it confers."*

49. As per Article 123 (2) & (3) of EPC extracted above, the amended

application/patent cannot contain subject matter which is beyond the content of the application as filed. The Opposition Division examined the amended claim of the Appellant under Article 123 of EPC and held that it satisfied the criteria, however, it was of the view that the amended claim did not involve any inventive step. This decision was appealed against to the Appellate Board. In appeal, the Appellate Board observed that:

> *"Claim 1 as granted related to a photographic emulsion characterised by having been prepared by specific manufacturing processes. Amended Claim 1 seeks protection for only one of these processes."*

50. The Appellate Board then analysed the specification and found that the process was contained in the original description on page 3. Thereafter, on the question of conversion from a *'product by process'* claim to a *'process'* claim, it held as under:

> *"**The change in category from a product-by-process claim to a (manufacturing) process claim is, in the present circumstances, admissible.** Claim 1 of the patent specification protected a product (photographic silver chlorobromide emulsion with improved characteristics) which was characterised by the processes described in this claim. **In a case such as this, the protection afforded by the granted patent must necessarily extend to all those methods of manufacture covered by the processes described in the claim and disclosed in the patent specification. By restricting Claim 1 to only one of these methods** - namely to one of the two alternatives described on page 2, line 55, of the patent specification, the one specifying that silver halide solvent is added during chemical ripening **- the patent proprietors have ceased to claim absolute product protection and have undertaken a significant limitation***

<u>of their claim.</u>
<u>There are therefore no objections to the present claims of the main request under Article 123(3) EPC.</u>"

51. Thus, in the case of ***Konica (supra)***, the Appellate Board categorically holds that the conversion and the change in category of *'product by process'* claims to *'process'* claims is clearly admissible. In fact, the Appellate Board holds that the Applicant has given up the claim for absolute product protection and has limited their claim significantly.

52. On the other hand, Mr. Harish V. Shankar, ld. CGSC places reliance on the Ayyangar Committee Report to argue that change in category of claims from '*product by process claims*' to '*process claims*' is not permissible. The said Report analyzes the provisions relating to amendment of specification in the U.K. Patent Act, 1907-46. It also analyzed the decision of the House of Lords in ***May and Baker Ltd and Others v. Boots Pure Drug Company Ltd [1950] UKHL 1*** wherein the House of Lords interpreted the power to amend claims very narrowly on the basis of section 21(6) of the UK Patents Act, 1907-1946. The said decision was criticized on the ground that the power of amendment ought not to be unduly restricted as such restrictions would deprive an inventor of a valuable invention of its legitimate rights. Later, Section 21(6) of the Act of 1907-1946, on which the decision in ***May and Baker's case (supra)*** was based was modified. After considering the history of the power of amendment in the UK, the Ayyangar Committee Report observed as under:

> *"553. Having considered the matter carefully, have reached the conclusion that there is no need to change the scope of the existing provision as regards the power of amendment and that* ***<u>where the invention which emerges as a result of an amendment is</u>***

different from that which was the subject matter of the specification as originally accepted, such an amendment should not be permitted. *I might add that section 50 of the Canadian Patents Act restricts reissue of patents to "the same invention" as that for which the original patent was issued, and though that Act has been amended from time to time, even as late as 1953-54, no change has been made in the wording of this provision.*

594. As I have already pointed out, Clause 34 (6) applies to cases of applications for amendments both before and after acceptance, and adopts the same rule, as regards the nature and scope of permissible amendments ***I consider that the scope of an amendment before acceptance ought to be wider than that after acceptance because at the former stage the specification is not disclosed to the public. It is then wholly a matter between the applicant for the patent and the office, and such amendments as are necessary to afford to the applicant, the benefit of the invention which he has disclosed in his complete specification ought to be available to him****. On the other hand, after the acceptance of the application, and its advertisement, the contents of specification become open to public inspection, and the rights of third parties who have started work on the basis of the claims made or not made, by the applicant in the published specification should be taken into account in defining the scope of the amendment which the applicant or the patentee might be permitted to effect.* ***After a complete specification has been accepted two limitations not applicable to amendments at the earlier stage should be imposed. The first is in regard to the formulation of new claims which were not found in the original specification.*** *Where a complete specification has not been advertised, there would be no question of a dedication of the unclaimed portion of the invention to the public and hence there cannot be*

any objection to a claim being formulated in respect of an invention disclosed in the specification if by error the claim has not been properly made or formulated. ***But where the specification has been accepted and advertised, the position is entirely different. In that case unless the claim after amendment would fairly fall within the claim before amendment it should not be permitted.*** *In other words, it should be presumed that all claims not made, except by reason of obvious mistake, in the specification before acceptance are abandoned.*

555. ***The second is a requirement that the invention before and after the amendment should be identical. This requirement would be out of place before acceptance and at that stage an amendment may be allowed so long as the invention is comprehended within the matter disclosed.*** *A mere shifting of the centre of gravity ought not to preclude an applicant from adjusting that centre until the specification is accepted, and is thrown open to public inspection. After that date, other interests and rights intervene and hence the applicant should be precluded from making a claim for any other inventions by amendments even if such be by way of disclaimer and the amendment would merely shift the centre of gravity (vide May & Baker'case)"*

53. The import of these paragraphs of the Ayyangar Committee Report has been considered by the IPAB in ***Tony Mon George (supra)*** and it has held that the Report favours wider scope of amendment before acceptance to that after acceptance. The IPAB concluded that if the amended claims define any 'new' features, hitherto not defined in the body of the claims, then they should not be allowed but if they are clarificatory or disclaim earlier claimed features, they can be allowed. The relevant observation of the IPAB is as

under:

> ***"36.*** *Keeping in view the settled principles of law, on amendments of the claims, we agree that no new claim may be allowed. But the whole question is whether the claim inserted in "new". Does it define any "new" feature(s) hitherto not defined in the body of the claims? If the answer is 'yes', then such claims are not allowed to be inserted. We refer to the body of the claims as originally filed, and amended subsequently, in both these sets the claim relating to "A composition comprising an isolated antibody or antigen-binding fragment thereof ..." are present. The dependent claims inserted to qualify the features already covered in the principal claims and having sufficient basis in the description cannot be held to be "new". Therefore, we allow the amended set of claims by the appellant except claim 5. We also allow claim 8 for reasons explained in earlier paragraphs."*

54. A perusal of the paragraphs of the Ayyangar Committee Report clearly shows that the purport and intention of this Report was to give broader and wider permissibility for amendment of claims and specification prior to the grant and restrict the same post the grant and advertisement thereof. The Report is also categorical in its observation that the invention before and after amendment need not be identical in case of amendment before acceptance *"so long as the invention is comprehended within the matter disclosed"*.

55. When this standard, as contemplated by the Ayyangar Committee Report, is applied to Section 59 of the Act as it stands today, it becomes clear that amendments to a patent specification or claims prior to grant ought to be construed more liberally rather than narrowly. The purport and spirit of Article 123 of the European Patent Convention is not too different. In effect,

the legislative material and the statutory provisions require that nothing new should be permitted to be inserted in the specification or claims. So long as the invention is disclosed in the specification and the claims are being restricted to the disclosures already made in the specification, the amendment ought not be rejected, especially, at the stage of examination prior to grant.

56. In ***AGC Flats Glass Europe SA v. Anand Mahajan 2009 (41) PTC 207 (Del)*** a ld. Single Judge of this Court has clarified the legal position in relation to disclaimer vide amendment of claims. When the applicant seeks to narrow down or crystalise the claims, ultimately limiting the scope of invention, the amendment ought to be ordinarily allowed. The only consideration that must be kept in mind is that the amended claims are not inconsistent with the earlier claims in the original specification. The relevant part of the said judgment reads as under:

> *18. Of course, the law operates differently when it comes to narrowing down or crystallizing the claims and apportioning those claims/subjects which are irrelevant and ultimately making it narrow and limiting the scope of the invention. An amendment under these circumstances is allowed and the excluded portion is disclaimed and the amendment becomes what is called a disclaimer. The disclaimer doctrine thus means that a right holder is delimiting the scope of the invention by narrowing down the claims to its inconvenience in a way which makes the amended claims not inconsistent with the earlier claims in the original specification. This recourse of disclaimer is adopted by the right holders in order to clarify the exact scope of the invention, once they are faced with the invalidity of their patents.*

57. This position of law has been reiterated by this Court in ***Sulphur***

Mills Limited v. Dharamraj Crop Guard Limited (2021) 87 PTC 567 wherein the Court held as under:

> *84. The Defendants have also argued that the Controller ought not to have permitted the amendments to the claims of IN'429. It is seen that the Plaintiff has amended IN'429 on four occasions during the examination and oppositions process. The consistent view of the Controller, except in order dated 24th October, 2009 which is no longer in operation, has been that the said amendments were well within the scope of the originally filed claims and the Plaintiff only sought to restrict the claims and not broaden them. The view having been that the amendments are in accordance with Section 59 of the Patents Act, 1970, the mere fact that the Plaintiff has amended the claims would not weigh against the Plaintiff.* ***It is usual for patent applicants to edit, amend, modify and vary the claims during the examination and opposition process. So long as the amendments sought are within the scope of the claims originally filed, no adverse conclusion can be drawn on the basis of the said amendments****.*

58. By applying the principles laid down in the above discussed provisions and decisions, it is clear that in the present case, the Applicant is amending and narrowing the scope of the claims and not expanding the same. The process sought to be claimed in the amended claims has been clearly disclosed in the patent specification. The said process is not sought to be added newly by way of an amendment. The amendment is, thus, within the scope of the patent specification and claims as originally filed. In the opinion of the Court, the amended claims of the Appellant satisfy the conditions of Section 59(1) of the Act as specified above. Thus, the objection under Section 59(1) of the Act is not sustainable.

59. The current enquiry by this Court having been restricted to the objection under Section 59 of the Act, the questions of lack of inventive step and non-patentability under sections 3(d) and 3(e) of the Act raised in the FER and the hearing notices would remain to be decided by the Patent Office. It is clarified that this Court has not given any opinion on the objections.

60. Accordingly, the present petition is allowed to the extent that the amended claims filed by the Appellant on 24th January, 2021 are directed to be taken on record. The same shall now be examined in accordance with law on the other grounds including of novelty, lack of inventive step, non-patentability under Section 3(d) and 3(e) of the Act, in an expeditious manner.

61. The ld. Deputy Controller of Patents is directed to dispose of the application of the Appellant within a period of six months.

62. The appeal and all pending applications are disposed of in these terms.

PRATHIBA M. SINGH, J.

JULY 5th, 2022
dj/sk