



2026:DHC:5166-DB



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

Reserved on: 25 February 2026

Pronounced on: 01 July 2026

+ LPA 545/2024

SULZER MIXPAC AG

.....Appellant

Through: Mr. Peeyoosh Kalra, Mr. Vineet Rohilla, Mr. Pankaj Soni, Mr. Debashish Banerjee, Mr. Rohit Rangi, Mr. Ankush Verma and Ms. Gurneet Kaur, Adv.

versus

ASSISTANT CONTROLLER OF
PATENTS AND DESIGNS

.....Respondent

Through: Mr. Sushil Kumar Pandey, SPC
with Ms. Isha Singh, Adv.

CORAM:

HON'BLE MR. JUSTICE C. HARI SHANKAR

HON'BLE MR. JUSTICE OM PRAKASH SHUKLA

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JUDGMENT

01.07.2026

C. HARI SHANKAR, J.

A. The *lis*

1. The appellant Sulzer Mixpac AG filed Application 1329/DEL/2012 on 1 May 2012 before the Controller of Patents for registration of a patent in respect of an invention¹ titled “Static Mixer”. The application was rejected by the Assistant Controller of

¹ “the subject invention” hereinafter



Patents and Designs² by an order dated 10 March 2021. CA (Comm. IPD-PAT) 19/2021, preferred under Section 117A(2)³ of the Patents Act, 1970, assailing the said order dated 10 March 2021, stands dismissed by a learned Single Judge of this Court by judgment dated 5 April 2024. The present appeal assails the said judgment.

B. Facts

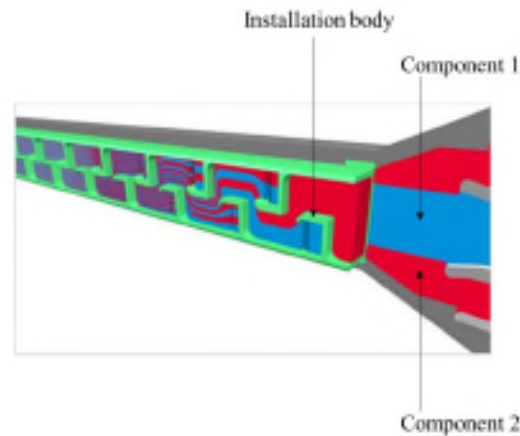
2. The subject invention relates to a plastic static mixer with an installation body, which is used to mix molten polymers. These polymers are injected into the mixer using injection molding machines. The mixer itself is installed in a tubular mixing housing. Given the nature of the fluids which are required to be mixed, mixing has to be undertaken several times. For this reason, the subject invention consists of several installation bodies arranged one behind another. An illustrative diagram of the subject invention has thus been provided in the appeal, and also stands reproduced in the impugned judgment of the learned Single Judge:

² “ACPD” hereinafter

³ **117-A. Appeals to High Court —**

(1) Save as otherwise expressly provided in sub-section (2), no appeal shall lie from any decision, order or direction made or issued under this Act by the Central Government, or from any act or order of the Controller for the purpose of giving effect to any such decision, order or direction.

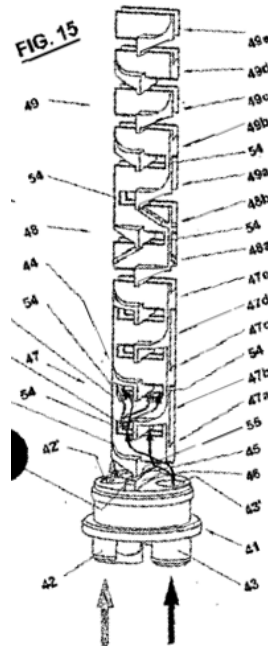
(2) An appeal shall lie to the High Court from any decision, order or direction of the Controller or Central Government under Section 15, Section 16, Section 17, Section 18, Section 19, Section 20, sub-section (4) of Section 25, Section 28, Section 51, Section 54, Section 57, Section 60, Section 61, Section 63, Section 66, sub-section (3) of Section 69, Section 78, sub-sections (1) to (5) of Section 84, Section 85, Section 88, Section 91, Section 92 and Section 94.



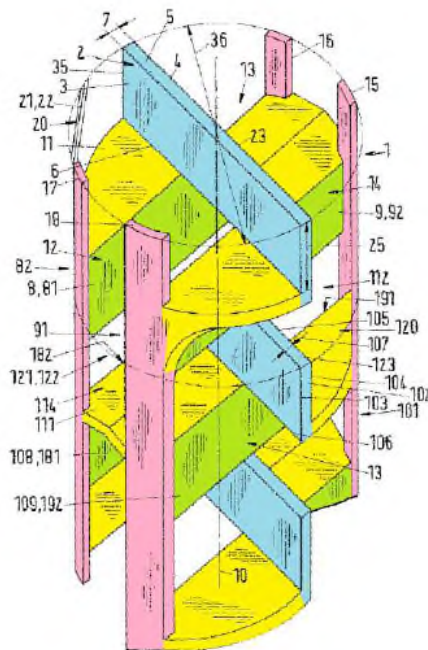
3. Given the nature of the fluids and the equipment concerned, the static mixer is approximately 30 mm in length, with very thin valves of thickness up to 3 mm. Ordinarily, it would not be possible to mix the fluids in a mixer with such thin valves, as the pressure of the flow of the fluid, as injected using the injection molding machine is very high. This difficulty is typically sought to be avoided by using multiple installation bodies within the static mixer, with the installation bodies being connected to each other via bar elements. The arrangement which so results allows the fluids to move from one installation body to the next, maintaining internal tool pressure of less than one thousand bars.

4. Such an arrangement was earlier known in European Patent EP'1426099⁴, Figure 15 of which showed a static mixer comprising a maximum of five installation bodies connected by a common bar element. In Figure 15 in EP'099, these five installation bodies are represented by 47A to 47E, connected by the bar element 54. A glance at Figure 15 reveals that one common bar element connected a maximum of five installation bodies:

⁴ "EP'099" hereinafter



5. A diagram of the subject invention, which the appellant sought to patent, has thus been provided in the appeal:



In the above diagram, the bodies in yellow, blue and green are the installation bodies where the longitudinal strips in pink are the bar

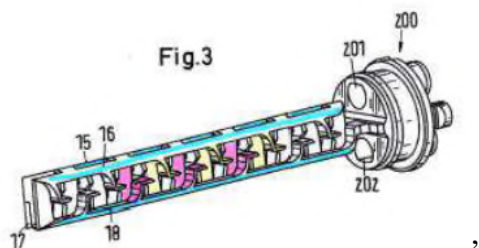


elements.

6. It is not necessary for us to enter into all the specifics of the subject invention, as the ACPD ultimately rejected the application for patenting the invention solely on the ground that it lacked any inventive step over prior art, as required by Section 2(1)(ja)⁵ and was not, therefore, an “invention” within the meaning of Section 2(1)(j)⁶, as it was obvious from prior arts cited as D-1 to D-4. Not being an “invention” within the meaning of the Patents Act, the subject invention was held, by the ACPD, not to be patentable.

7. The novel and inventive feature in the subject invention has thus been described in para 5(x) of the present LPA:

“(x) The subject invention provides improvement over the prior art by connecting more than five installation bodies to one another via a common bar element (15, 16, 17, 18). Figure 3 of the subject application, a colored version of which is reproduced below for ease of understanding, clearly illustrates this novel and inventive feature of the subject invention.



Thus, the novel and inventive feature in the subject invention *vis-a-vis* prior art is, according to the appellant, the ability to connect more than

⁵ (ja) “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;

⁶ (j) “invention” means a new product or process involving an inventive step and capable of industrial application;



five installation bodies by a common bar element. This, according to para 5(xii) of the LPA, results in several technical advantages of the subject invention over prior art, such as improved homogeneity of the mixer, a longer length of the mixer owing to lesser internal pressure and a stiffer mixer, resulting in reduced tendency of breakage.

8. As already noted, the appellant applied on 1 May 2012 for patenting the subject invention *vide* Application 1329/DEL/2012. A First Examination Report⁷ was issued by the Controller of Patents on 22 May 2019, raising various objections. The appellant replied to the FER on 17 June 2019, following which a Subsequent Examination Report⁸ was issued by the ACPD on 1 February 2021. Written submissions, in response to the SER, were filed by the appellant on 4 March 2021.

9. By order dated 10 March 2021, the ACPD rejected the appellant's application dated 1 May 2012.

C. Order dated 10 March 2021 of the ACPD

10. At the very commencement of the order dated 10 March 2021, the ACPD notes that the submissions advanced by the appellant with respect to the various objections raised in the SER were all found to be persuasive and in accordance with law, except for the objection with respect to novelty/inventive step relatable to Clauses (j) and (ja) of Section 2(1) of the Patents Act.

⁷ "FER" hereinafter

⁸ "SER" hereinafter



11. Before the ACPD, the appellant contended that none of the four prior arts D1 to D4, cited by the ACPD, disclosed a connection of more than five installation bodies to each other via a common bar element. The ACPD has dealt with this submission thus:

“iii. Consideration

2. The explanation on part of the applicant for novelty/inventive step is considered not persuasive for the specific reasons as below:

a. The applicant has taken a view that none of the cited documents discloses more than 5 installation bodies with a common bar element.

However, D1 in my considered view discloses one connection elements (14, 15, 114, 115, see figure 4) which is a mechanical equivalent of the common bar elements (15, 16, 17, 18) in the instant application for patent. (Reference numerals applicable to corresponding patent application). Also, D1 is able to teach arrangement of more than 5 installation bodies in a static mixer through disclosures as below:

➤ Paragraph 71 of D1 specifically teaches “Adjacent installation bodies 1, 101 can be connected to one another via at least one connection element 14, 15, 114, 115. Such a connection element increases the bending stiffness of the static mixer.”

➤ Paragraph 74 of D1 also teaches “The static mixer in accordance with any of the preceding embodiments is made of plastic by means of which even comparatively complicated geometries can be realized in the injection molding process. The totality of installation bodies (1, 101, 201, 301, . . .) has a longitudinal dimension 24 and each of the cross-sectional areas 23, 123 has a wall thickness 7 in particular for



static mixers including a plurality of installation bodies.”

➤ Paragraph 75 of D1 also teaches “Experimentally, static mixers in accordance with the fourth embodiment were able to be manufactured with a longitudinal dimension of 60 mm and a mean wall thickness of 0.42 mm in a foamed construction. Accordingly, the ratio of flow path to wall thickness amounts to 143:1. Such a mixer is made up of 12 installation bodies.”

Therefore, D1 itself is a sufficient document to disclose all the technical features of the claimed invention i.e. installation of more than 5 installation bodies (as taught in paragraphs 74 & 75) connected through a common bar element 14, 15, 114, 115 and rotated at particular angles (see paragraph 61) in a static mixture. Accordingly, D1 is considered as the closest prior art document anticipating all of the claimed features.

b. D3 demonstrates a reinforced strip (12, 13, see figures 11, 12) equivalent to the common bar in the instant invention. The same accommodates the periphery of the mixer element of various shapes (See drawings 3-6, 11, 12). The number of installation bodies demonstrated is more than 5 in drawings 1, 5, 6.

Therefore, in my considered opinion D3 also is a sufficient document to disclose all the technical features i.e. installation of more than 5 installation bodies (as taught in paragraphs 74 & 75) connected through a common bar element 14, 15, 114, 115 in a static mixture at different angles (see drawings) with respect to each other.

c. D2 in figure 1 itself reveals more than 5 installation bodies (mixer structure).

d. D4 in figure 8 demonstrates a common connecting element 35 to join the mixture elements. The said common element is mechanical equivalent to the common bar element of the instant patent application which is claimed to be a characterizing feature of the instant application.



e. In view of my observations in above paragraphs and specific observation & explanation in paragraph 'a', I am of the opinion that all the features of the instant patent application are anticipated by D1. Accordingly, the claimed invention is considered not novel under section 2(1) (j) of the Patents Act, 1970.

f. A person skilled in the art would have sufficient motivation for installation of:

- Multiple installation bodies specifically more than 5 in view of teaching in D2, D3 and,
- Mechanically equivalent common bar element in view of D3 & D4 in the static mixer in D1.
- The said installation body may be at a particular angle w.r.t. each other in a longitudinal direction as taught in D1.

The applicant has failed to demonstrate any surprising effect in the claimed invention as compared to the teachings in the cited prior arts. Accordingly, the claimed invention is considered not inventive under section 2(1)(ja) of the Patents Act, 1970.”

D. The Impugned Judgment

12. The reasoning of the learned Single Judge is as under:

“14. Counsel for the appellant has tried to place his assertion on their improved functionality of the subject invention. However, the subject application is comparing the subject invention with EP1426099B 1 and not their own cited prior arts D1-D4.

15. After assessing these documents, the Court is of the view that as opposed to the appellant's claim that there is inventiveness in achieving common bar element connecting adjacent installation bodies and having multiple installation bodies in the mixer, is not made out since the prior art reveals and teaches that there can be multiple installation bodies, as well as connections through a mechanical equivalent of a common bar element, that is already provided *inter alia* in the form of a reinforced wall.



16. Ultimately, it is a question of encasing the various installation bodies in order to allow the fluid to move through the installation bodies for the purposes of mixing. This would not amount to an inventive step as has been rightly concluded by the Patent Officer, since it would also be obvious to a person skilled in the art.

17. Counsel for the appellant submits that in their invention the fluid is also flowing through the common bar element as opposed to the prior art which does not provide for the same.

18. However, on an assessment of this submission, the Court is not convinced since the fluid has to fundamentally and obviously move through the installation bodies which are the essential elements allowing the proper mixing of the component fluids. The installation bodies in the prior arts are connected with certain connecting elements and the subject invention has sought to extend those connections to join all the installation bodies. In all cases the fluids will flow through that arrangement. The assertion that it flows through the common bar element is obvious once the common bar element encases all the installation bodies. However, as noticed above, connectivity has been merely extended by the subject invention to run through all the installation bodies.”

21. The other objection which has been taken was on the technical advantages of the said invention in that the pressure loss is lesser. However, there is no data which has been provided with respect to prior art DI-D4 in this regard or a comparative assessment of the functionality element. The only comparison which has been done is with the prior art EP 1426099B1.”

13. Aggrieved by the judgment of the learned Single Judge, rejecting the said appeal, the appellant has filed the present appeal.

14. We have heard Mr. Peeyoosh Kalra, learned Counsel for the appellant and Mr. Sushil Kumar Pandey, learned SPC for the respondent at length.

E. Rival Submissions and Analysis



I. Preliminary Objection to maintainability

15. Mr. Pandey advanced a preliminary objection to the maintainability of the appeal as he submitted that no Letters Patent Appeal⁹ is maintainable against an order passed by the learned Single Judge under Section 117A (2) of the Patents Act.

16. Mr. Kalra submits, *per contra*, that the issue of maintainability stands covered against the respondent by the judgment of a Division Bench of this Court in *Promoshirt SM SA v. Armasuisse*¹⁰.

17. *Promoshirt* originated from objections filed by Armasuisse, a Federal Agency of the Swiss Federation, opposing an application filed by Promoshirt SM SA for registration of the trade mark “SWISS MILITARY”. Armasuisse’s oppositions were rejected by the Deputy Registrar of Trade Marks¹¹ by order dated 25 July 2022, and Promoshirt’s application proceeded to registration. Armasuisse challenged the decision before this Court, in appeal preferred under Section 91¹² of the Trade Marks Act, 1999. By judgment dated 4 January 2023, one of us (C. Hari Shankar J), sitting singly, rejected the appeals. Promoshirt challenged the decision by way of an LPA.

18. Before the Division Bench, Armasuisse advanced a preliminary

⁹ “LPA” hereinafter

¹⁰ 2023 SCC OnLine Del 5531

¹¹ “Dy RTM” hereinafter

¹² 91. Appeals to High Court.—

(1) Any person aggrieved by an order or decision of the Registrar under this Act, or the rules made thereunder may prefer an appeal to the High Court within three months from the date on which the order or decision sought to be appealed against is communicated to such person preferring the appeal.



objection to the maintainability of the LPA. It was contended that, in view of Section 100A¹³ of the Code of Civil Procedure, 1908¹⁴, no LPA would lie against the judgment dated 4 January 2023.

19. The Division Bench negated the challenge, holding that the proscription against appeal, under Section 100-A of the CPC, was only against orders passed in appeal against an order of the Civil Court. As the Dy RTM was not a “Civil Court” within the meaning of the CPC, the Division Bench was of the view, as expressed in the following paragraphs, that the LPA would be maintainable:

“77. We would think that the intent of Section 100A would be confined to a second appeal when preferred against a judgment of a Single Judge exercising appellate powers provided it pertained to a decree or order as defined by the Code. The bar would thus only operate where the decree or order against which the appeal was preferred before the Single Judge was of a civil court. We further note that Section 2(14) uses the expression “civil court” and not “court”. It would thus be doubtful whether the “trappings of a court” test as generally formulated would have any application. However, even if we were to proceed on the basis that such a test could be justifiably invoked for the purposes of Section 100A, the Registrar of Trademarks would not qualify the standards as enunciated.

78. In addition to the above, the LPA remedy would also not be available where the special statute subjects the appeal remedy to follow the rules applicable to appeals and embodied in the Code. Once the appeal is made subject to the rules incorporated in the Code, all restrictions to an appeal including Section 100A would get attracted and attached. This since the appeal provision in such a case would be deemed to have consciously adopted all restrictions as put in place under the Code and would override the letters patent provision. This would be in line with the ratio decidendi of *Avtar Narain Behal*¹⁵.”

¹³ **100-A.** No further appeal in certain cases.—Notwithstanding anything contained in any Letters Patent for any High Court or in any instrument having the force of law or in any other law for the time being in force, where any appeal from an original or appellate decree or order is heard and decided by a Single Judge of a High Court, no further appeal shall lie from the judgment and decree of such Single Judge.

¹⁴ “CPC” hereinafter

¹⁵ *Avtar Narain Behal v. Subhash Chander Behal*, 154 (2008) DLT 140 (FB)



20. The *ratio decidendi* of *Promoshirt* would apply, *mutatis mutandis*, to the maintainability of an appeal against an order passed by the ACPD under Section 117A (2) of the Patents Act.

21. We, therefore, reject Mr. Pandey's objection to the maintainability of the present appeal.

II. On Merits

22. Mr. Kalra submitted, initially, that, in para 120 of its judgment in *F Hoffmann-La Roche Ltd v. Cipla Ltd*¹⁶, the Division Bench has outlined five steps which are required to be followed while examining whether the patent under consideration was obvious from prior art, or not, thus:

“Step No. 1 To identify an ordinary person skilled in the art,

Step No. 2 To identify the inventive concept embodied in the patent,

Step No. 3 To impute to a normal skilled but unimaginative ordinary person skilled in the art what was common general knowledge in the art at the priority date.

Step No. 4 To identify the differences, if any, between the matter cited and the alleged invention and ascertain whether the differences are ordinary application of law or involve various different steps requiring multiple, theoretical and practical applications,

Step No. 5 To decide whether those differences, viewed in the knowledge of alleged invention, constituted steps which would have been obvious to the ordinary person skilled in the art and rule out a hideshow (*sic* hindsight) approach.”

¹⁶ 225 (2015) DLT 391 (DB)



Mr. Kalra submits that, inasmuch as the learned Single Judge has not followed the above five steps, seriatim, the impugned judgment cannot sustain.

23. We confess our inability to agree.

24. Adjudication, under the Patents Act, has to be guided by the statute. To our mind, the five steps enumerated in para 120 of *Roche* merely provide guidance as to how, in a particular case, the court has to proceed while examining the aspect of inventiveness or obviousness of an invention, which is sought to be patented, vis-à-vis prior art. They cannot be regarded as commandments cast in stone, implicit compliance with which is essential in every case. Where the case is capable of being decided without strictly following the rigour of the said five steps, it cannot be said that the decision is vitiated solely on that ground.

25. On merits, Mr. Kalra placed his precise submissions in writing, thus, apropos the prior arts D1 to D4:

“The structures of installation bodies of mixer elements disclosed in prior arts D1, D2, D3 and D4 are completely different than the features of installation body recited in claim 1 of the subject application. A chart comparing the mixer elements disclosed in the cited prior arts with mixer element according to the subject invention has been provided in the chart annexed herewith as Annexure-C.

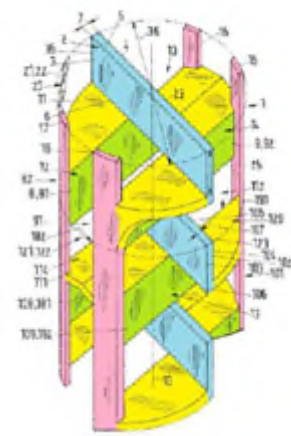
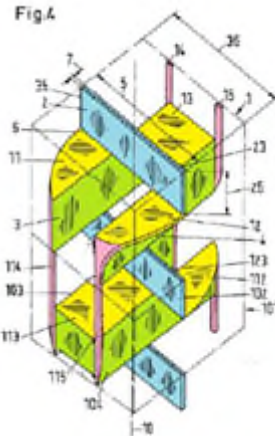
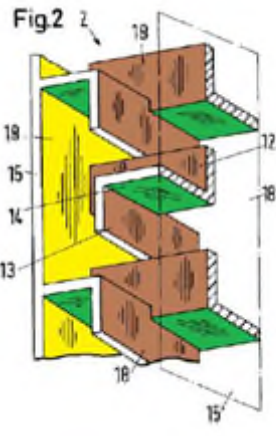
In D1, only adjacent installation bodies are connected to each other, however, all the installation bodies are not connected through common bar element. The walls 15 of D2 and



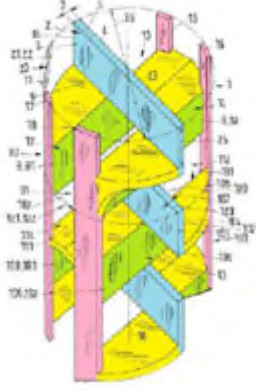
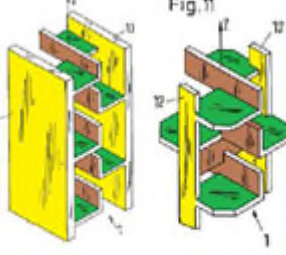
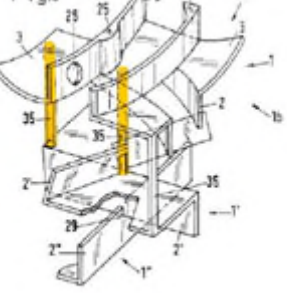
reinforcement strips 12 and 13 of D3 are not equivalent to the common bar element of the subject invention and do not perform the same function. The connecting elements 35 of D4 placed between the spaced mixing elements 1, 1' as shown in above figure 8 of D4 connect only adjacent mixing elements and not all mixing elements.

Neither D1 nor D2, D3 and D4 discloses or suggests the feature that "more than five installation bodies are connected to one another via a common bar element", as recited in claim 1 of the subject application. D1 to D4, individually or in combination cannot lead a person skilled in the art to the mixing element of the presently claimed invention. Thus, the invention claimed in the subject application is novel and inventive over the cited documents D1 to D4."

The Chart annexed as Annexure C to the written submission, to which the submission alludes, read thus:

Appellant's Subject Invention	D1: EP2181827A2 equivalent to US20100097883 A1	D2: EP1312409B1 equivalent to US20030179648 A1
		
<ul style="list-style-type: none"> • Each installation body divides the flow of material in three streams • All installation bodies are connected by a common bar 	<ul style="list-style-type: none"> • Each installation body divides the flow of material in three streams • Only adjacent installation bodies are connected. There is no 	<ul style="list-style-type: none"> • Each installation body divides the flow of material in two streams



element	common bar element	
Appellant's Invention	D3: EP0815929B1 equivalent to US5851067	D4: EP0749776B1 equivalent to US5944419
	 <p>Fig. 12</p>	 <p>Fig. 8</p>
<ul style="list-style-type: none"> • Each installation body divides the flow of material in three streams • All installation bodies are connected by a common bar element 	<ul style="list-style-type: none"> • Each installation body divides the flow of material in two streams 	<ul style="list-style-type: none"> • Each installation body divides the flow of material in multiple streams • Only adjacent installation bodies are connected. There is no common bar element

26. Having considered the submissions of Mr. Kalra, we find the reasoning of the learned ACPD, in the order dated 10 March 2021, to be unexceptionable.

27. The inventive feature of the subject invention, vis-à-vis prior art, even as per the appellant, was the ability to combine more than five installation bodies using a common bar element. Indeed, this is the specific stand taken by the appellant in para 5(x) of the present LPA. Indeed, even in the Chart annexed as Annexure C to the written submissions filed by Mr. Kalra, the only two features which have been



cited as distinguishing the subject invention from the prior art documents D1 to D4 are the presence, or absence, of a common bar element interconnecting all the installation bodies, and the number of streams into which each installation body divides the flow of the fluid.

28. Insofar as the number of streams into which each installation body divides the fluid flow is concerned, that was not even mentioned by the appellant, in its reply to the FER or the written submissions filed in response to the SER, as constituting the inventive feature of the subject invention. As such, we are not readily inclined to allow the appellant, at this stage, to raise this as a ground.

29. That apart, the number of streams into which the installation bodies divide the stream is not, even as per the complete specifications of the appellant's patent application, one of the prime features of the subject invention.

30. Insofar as comparison of the subject invention with the inventions disclosed in the prior art documents D-1 to D4 are concerned, the learned ACPD has relied on figure 4 in D-1, figures 11 and 12 and drawings 1, 5 and 6 in D-3 and figure 1 in D-2 to hold that the feature of ability to combine more than five installation bodies by one bar element, in the static mixer, was obvious from prior art. In this context, the ACPD has also legitimately relied on the fact that the prior art inventions were also of the appellant itself.

31. We may reproduce, for ease of reference, figure 4 in D-1, figures 11 and 12 and drawings 1, 5 and 6 in D-3 and figure 1 in D-2,



as under:

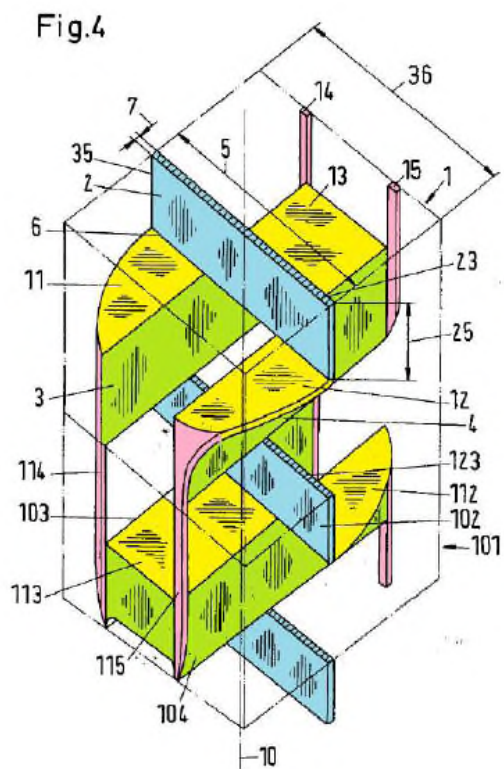


Figure 4 of D1

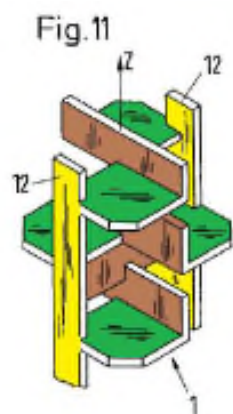


Figure 11 of D3

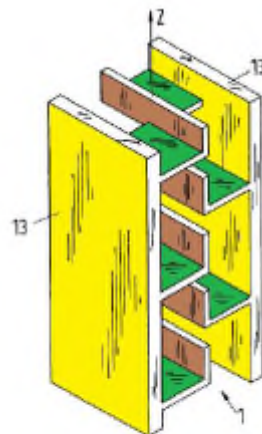


Figure 12 of D3

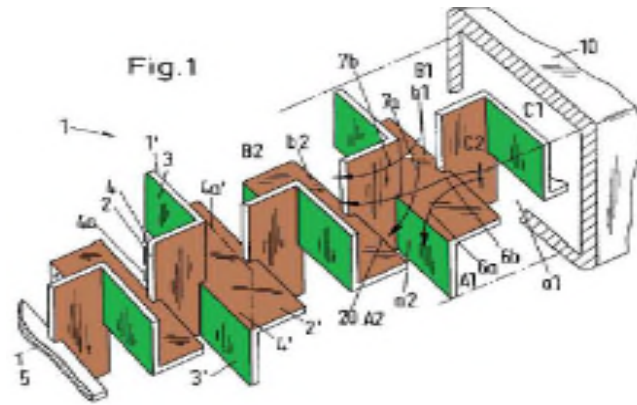


Figure 1 of D3

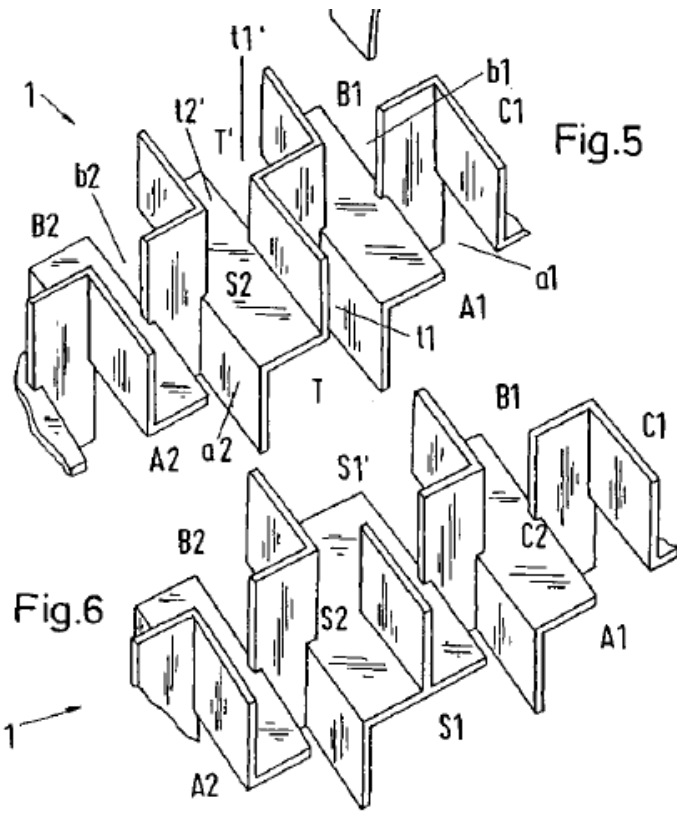




Fig.1

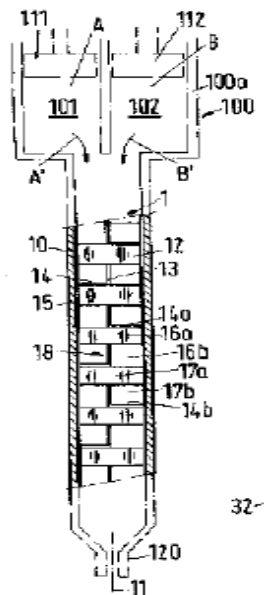


Figure 1 of D2

32. At a bare glance, we find the observations of the ACPD to be completely justified. In fact, the prior art document D1 by itself is sufficient to render the subject invention lacking in inventiveness. We have to bear in mind the fact that the aspect of inventiveness has to be seen from the point of view of a person skilled in the art and, especially in a case where the inventor is the same, the leap from prior art to the subject invention is much more easily scaled.

33. The elements at 14, 15 and 114 and 115 of figure 4 in prior art D1 clearly indicate the existence of a common connection element connecting multiple installation bodies. This diagram, seen in conjunction with paragraphs 71, 74 and 75 of D1 further envisage connection upto 12 installation bodies with one common bar element.

34. To the same effect are figures 11 and 12 in D3 and figure 1 in



D2. They all indicate multiple installation bodies being connected by one common element. Though the element, in the prior art documents at D3 and D2 are in the nature of a reinforced strip, the use of a bar element in place of reinforced strip would also be obvious to a person skilled in the art. It has to be remembered, yet again, that the inventor of D1 and of the subject invention are the same.

35. Drawings 1 and 6 in the prior art document D3 indicate joining of more than five installation bodies using a common bar element.

36. Clearly, therefore, all that the appellant undertook, while proceeding from its own prior documents D1 to D4, to the subject invention, of which the appellant sought to patent, was a mere modification, using the disclosures and teachings available in prior art documents, of which the main prior art D1 was of the appellant itself.

F. Conclusion

37. We, therefore, find no error in the decision of the learned Single Judge upholding the order of the learned ACPD rejecting the appellant's application for patenting the subject invention.

38. The appeal is accordingly dismissed.

C. HARI SHANKAR, J.

OM PRAKASH SHUKLA, J.

JULY 01, 2026

AR/DSN