



IN THE HIGH COURT OF JUDICATURE AT MADRAS

DATED: 01-04-2026

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THE HON'BLE MR JUSTICE SENTHILKUMAR RAMAMOORTHY

CMA(PT) No. 19 of 2025

Novozymes A/s
36 Krogshoejvej, Bagsvaerd, Denmark, Through
its authorised representative Mr.Araronnan Harish
Chandran

..Appellant(s)

Vs

The Assistant Controller Of Patents And Designs
The Patent Office, Intellectual Property Building,
GST Road, Guindy, Chennai 32

..Respondent(s)

PRAYER: Civil Miscellaneous Appeal is filed under Section 117-A pleaded to
against the order of Assistant Controller of Patents and Designs dated
17.02.2025 refusing the grant of patent to Indian Patent Application
202047008467.

For Appellant(s):

Ms.Vindhya S.Mani,
Kiran Manokaran
Sheerabadrinath.G
for M/s.Lakshmi Kumaran And Sridharan
Attorneys

For Respondent(s):

Mrs.V.Sudha, Senior Central Government Counsel



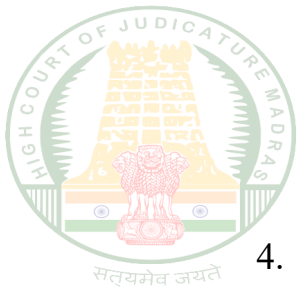
JUDGMENT

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This appeal is directed against order dated 17.02.2025 of the patent office rejecting Patent Application No. 202047008467 for the grant of patent for a claimed invention titled “ejector equipped fermenter”.

2. Learned counsel for the appellant invited my attention to the complete specification and pointed out that the claimed invention relates to fermenters for fermenting micro organisms for the production of a fermentation product. After pointing out that the prior art envisaged the use of stirrers, she submitted that the use of injectors instead of stirrers has several benefits. Reference was made to internal page 9 of the complete specification in relation to such benefits.

3. Turning to the impugned order, learned counsel pointed out that the appellant’s contention with regard to economic significance in the form of lower operating costs was noticed in the impugned order at internal page 9 thereof, but no findings were recorded with regard thereto. Learned counsel contends that technical advance is not mandatory to qualify for an inventive step and that economic significance is sufficient. Learned counsel also submitted that the conclusions with regard to the claimed invention being non patentable under Section 3(d) and Section 3(f) are unreasoned and it is unclear from the impugned order as to how said exclusions apply.



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4. In response to these contentions, learned counsel for the respondent referred to written instructions and submitted that it is insufficient to show economic significance and that it is necessary to establish that the feature of the claimed invention having economic significance should not be obvious to a person skilled in the art. As regards non adherence to the five step obviousness analysis, learned counsel submits that a three step analysis involving examination of the invention disclosed in the prior art, the invention disclosed in the application and whether the claimed invention would be obvious to a person skilled in the art is sufficient. As regards Section 3(d), it is stated that it also applies to a new machine or apparatus unless it results in a new product or employs at least one new reactant.

5. In the complete specification of the claimed invention, the prior art is noticed. Thereafter, the benefits of the claimed invention are narrated as follows:

“The fermenters according to the invention has several benefits compared with traditional stirred fermenters. First, the fermenters according to the invention are significantly cheaper to construct, in part because there is no need for stirrer and the engine driving the stirrer, but also because the fermenter can be made in lighter materials because the fermenter no longer need to bear the stirrer engine or endure the trembles and forces that



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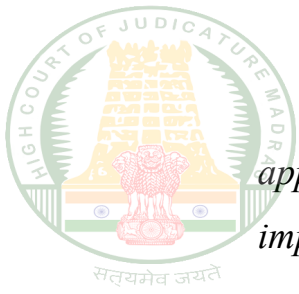


inevitable results from arranging and operating an engine and stirrer arrangement on top of a fermenter. Further the fermenter of the invention does not require a building because the necessary utilities can be arranged in a container next to the fermentation tank, and further, by moving most equipment from the tank top to a container enables sharing equipment between two or more fermenters which also contribute to reducing the cost for the individual fermenter. Further, the fermenter design according to the invention allows the formation of very large fermenters because of the simple set – up and also because there is no need to scale up a large agitator.

Still another benefit, the fermenters according to the invention is cheaper in operation than a corresponding stirred tank reactor because the energy consumption is significantly lower. This is in a large extent because the energy required for the pump driving the circulation in the circulation loop according to the present invention is significantly lower than the energy required to drive the stirrer in a corresponding stirred tank fermenter.”

6. In the impugned order, the assertion of the appellant with regard to economic significance was noticed at internal page 9. The relevant extract is set out below:

“The instant invention provides the experimental results to show that the claimed fermentor has a surprisingly lower operating cost than both high and medium powered stirred tank reactors (STR); see Example 3, Table 4 on page 17 of the



application as filed. Examples 4 and 5 confirm this industrially important observation.”

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7. After taking note of the contention with regard to economic significance, in the analysis section of the impugned order, prior art documents D1 to D4 are discussed. Thereafter, a table has been set out listing the features of the claimed invention and prior arts D1 to D4. This is followed by the conclusion that D3 is the closest prior art. The impugned order records that D3 does not teach at least one of the two-phase injectors arranged to inject the stream at 30-80°. It also records that D3 does not teach at least one loop connected to a pump withdrawing fluid from the fermenter and to provide fluid for two phase injectors, and one or more inlets and one or more outlets. Thereafter, a conclusion is recorded to the effect that the claimed invention combines features that are either expressly disclosed in the prior art or represent routine design choices. There is no discussion or finding with regard to the claimed invention being of economic significance or any analysis with regard to why a person skilled in the art would be impelled to combine the features of prior arts D1 to D4 to arrive at the claimed invention.

8. As regards the findings of non patentability, it is unclear from the impugned order as to which limb of Section 3(d) is applicable. While the written instructions to learned counsel for the respondent makes reference to the



applicability of Section 3(d) to a machine or apparatus, this cannot be gleaned from the impugned order. Even with regard to Section 3(f), the order does not contain a concrete basis for concluding that the claimed invention is a mere arrangement or re-arrangement of known devices.

9. For all these reasons, the impugned order cannot be sustained and is hereby set aside. As a corollary, the matter is remanded on the following terms:

(i) In order to preclude the possibility of pre determination, an officer other than the officer who issued the impugned order shall undertake re-consideration upon remand.

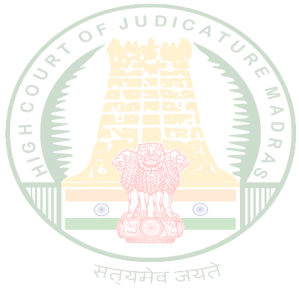
(ii) After providing a reasonable opportunity to the appellant, a speaking order shall be issued within *four months* from the date of receipt of a copy of this order.

(iii) For the avoidance of doubt, it is clarified that no opinion has been expressed on the merits of the patent application.

(iv) There shall be no order as to costs.

01-04-2026

Index: Yes/No
Speaking/Non-speaking order
Neutral Citation: Yes/No
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To

The Assistant Controller Of Patents And Designs
The Patent Office, Intellectual Property Building,
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