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

% ***Judgment Reserved on: 24.03.2025***
Judgment pronounced on: 07.05.2025

I.A. 5255/2024
IN
\+ **CS(COMM) 196/2024 & CC(COMM) 28/2024**

CRYSTAL CROP PROTECTION LIMITED .....Plaintiff
Through: Mr. Dayan Krishnan, Senior Advocate with Mr. Gaurav Barathi, Ms. Srika Selvam, Ms. Rasya Rawal and Mr. Harsh Gupta, Advocates

versus

SAFEX CHEMICALS INDIA LIMITED & ORS. .....Defendants
Through: Mr. J. Sai Deepak, Senior Advocate with Mr. Ajay Amitabh Suman, Mr. Rishi Bansal, Mr. Deepak Srivastava, Mr. Rishabh Gupta and Ms. Daesha Mehta, Advocates

CORAM:
HON'BLE MR. JUSTICE AMIT BANSAL

JUDGMENT

AMIT BANSAL, J.

I.A. 5255/2024 (*under Order XXXIX Rule 1 and 2 CPC*)

1. By way of the present judgment, I shall decide the above-captioned application filed on behalf of the plaintiff company under Order XXXIX Rules 1 and 2 of the Code of Civil Procedure, 1908 [hereinafter the 'CPC'].

2. The present suit has been filed seeking relief of permanent injunction restraining the defendants from infringing the plaintiff's registered patent no. 417213, titled as "*Weedicidal Formulation and Method of Manufacture thereof*" [hereinafter the 'suit patent'] along with other ancillary reliefs.

3. On 12th March 2024, the predecessor Bench issued summons in the suit and notice in the interim injunction application. After hearing the arguments on behalf of the counsel for the parties, the predecessor Bench directed the defendants to provide a full disclosure of their product's composition in their reply. The Bench also directed the plaintiff to file an affidavit detailing the functional role of the 'dyeing agent or pigment' in the suit patent, and in the said affidavit, the plaintiff was directed to clarify whether the absence of a pigment in the defendants' products would still constitute a violation of Claim no.1 of the suit patent.

4. Reply to the interim injunction application was filed on behalf of the defendants on 29th July, 2024.

5. Arguments on the application were heard on 28th November, 2024, 23rd January 2025, 27th February 2025 and 24th March, 2025, when the judgment was reserved. Subsequently, written submissions have also been filed on behalf of the parties.

CASE SETUP BY THE PLAINTIFF

6. The case set up by the plaintiff company in the plaint is as follows:

6.1. The plaintiff is a company manufacturing and selling, *inter-alia*, pesticides, insecticides, weedicides, herbicides, agrochemicals for plant protection, plant-growth regulators, and micronutrient fertilisers.

6.2. The plaintiff has a substantial presence across India, supported by an extensive marketing, sales, and distribution network comprising over 5,000 distribution partners and a dedicated sales force of more than 500 employees.

6.3. The plaintiff is actively engaged in the innovation, research, and development of new products and processes in the fields of pesticides,

micronutrient fertilizers, and other related areas. As a result of its extensive research, the plaintiff has filed multiple patent applications, some of which have been granted by the Patent Office.

6.4. The plaintiff's continuous efforts in research and innovation have resulted in the manufacture and marketing of high-quality goods, which have generated significant sales. The plaintiff's annual sales turnover for the last ten years is given in paragraph 10 of the plaint. In the financial year 2022-2023, the sales of the plaintiff were more than Rs. 2,400 Crores.

6.5. The suit patent was filed on 9th March 2010 and was granted on 9th January 2023. The same is still valid and subsisting. The bibliographic details of the suit patent are given below:

Field	***Information***
Application No.	538/DEL/2010
Applicant	CRYSTAL CROP PROTECTION LIMITED
Inventor	Nand Kishore Agarwal
Priority Date	09.03.2010
Date of Filing	09.03.2010
Publication Date	03.02.2012
Date of Grant of Patent	09.01.2023
Expected Expiry Date	09.03.2030

6.6. The suit patent pertains to a novel composition comprising '*Clodinafop 9% and Metribuzin 20%*' (in a ratio of 1:2.2), in combination with a surfactant, a dyeing agent or pigment, and a safener. The composition claimed in the suit patent results in enhanced and more efficient control of

weeds and exhibits a long-lasting impact post-treatment, particularly with respect to the control of weeds affecting wheat crops. The said composition significantly reduces phytotoxicity and provides improved efficacy, ultimately leading to increased crop yield while ensuring effective crop protection.

6.7. Against the suit patent application, four (4) pre-grant oppositions were filed. However, all such oppositions were dismissed by the Controller of Patents *vide* order dated 9th January 2023, and the suit patent was duly granted to the plaintiff. Subsequently, two writ petitions being W.P. (IPD) 43/2023 and W.P. (IPD) 45/2023, were filed by Mr. Anand Arya and by M/s Haryana Pesticides Manufacturers Association, respectively. The writ petition filed by Mr. Anand Arya was withdrawn, and the one filed by M/s Haryana Pesticides Manufacturers Association was dismissed by the Court *vide* order dated 8th January 2024.

6.8. A post-grant opposition has also been preferred by M/s Haryana Pesticides Manufacturers Association which is pending. It is stated that the pendency of the post-grant opposition has no bearing on the validity of the granted patent and does not preclude the plaintiff from enforcing its rights *qua* the suit patent.

6.9. The suit patent is being commercially worked in India, as the plaintiff has been manufacturing and marketing its patented product under the name ‘ACM-9’. The product bearing the trademark ‘ACM-9’ also reflects the suit patent application number and also discloses details of its ingredients as well as the method of use.

6.10. In January 2024, the plaintiff came across a product being sold under the name ‘RACER’, which was being manufactured and marketed by the

defendant no.1 in the present suit, Safex Chemicals India Limited.

6.11. Upon inspection of the product and its packaging, it was found that the formulation/composition of the said product was identical to the composition disclosed and claimed in the suit patent. As per the product packaging and defendant no.1's website, it is stated that the impugned product 'RACER' contains '*Clodinafop Propargyl 9% + Metribuzin 20% WP*'. Thereafter, the plaintiff procured a sample of the product 'RACER' for the purpose of testing and verification in its laboratory. On 31st January, 2024, the plaintiff conducted laboratory tests on a sample of 'RACER', which revealed the presence of '*Metribuzin Content – 20.0%*', '*Clodinafop-Propargyl Content – 9.0%*', along with a '*safener*', which was identical to the formulation claimed in the suit patent.

6.12. Defendant no.1, on its official website, has advertised itself as operating and managing several entities, including the defendant no.2, Indo Swiss Chemicals Limited, and the defendant no.3, Smith N Smith Chemicals Limited.

6.13. Upon visiting the website maintained by the defendant no.2 with the domain name www.indoswiss.in, the plaintiff discovered that the defendant no.2 is also infringing the suit patent by offering for sale a product under the name 'Trophy'. The said product contains the same composition as that disclosed and claimed in the suit patent.

6.14. The plaintiff also visited the website of the defendant no.3 at www.smithnsmith.net and found that defendant no.3 is offering for sale a product titled 'Jodi No.1', which claims to contain the identical composition as that of the suit patent. It is stated that the defendant no.1 is also advertising the product 'Jodi No.1' on its own website.

6.15. The plaintiff also discovered that the defendant no.1 had filed a post-grant opposition on 8th January 2024, which was subsequently withdrawn on 9th January 2024.

6.16. The defendants no.1 to 3 are acting in connivance and collusion with each other in infringing the suit patent. The unauthorized act of manufacturing, marketing and offering for sale of the product as claimed in the suit patent is in clear violation of the plaintiff's statutory rights and is aimed solely at unjust enrichment.

CASE SETUP BY THE DEFENDANTS

7. The case set up by the defendants in the written statement and the counter claim is as follows:

7.1. Defendant no.1, Safex Chemicals India Limited, is a company engaged in the manufacture, processing, packaging, and marketing of various agrochemical products, including but not limited to herbicides, weedicides, fungicides, and insecticides, with a product portfolio of over 108 items since its inception in 1991.

7.2. Defendant no.1 has established and operates several affiliated companies, including the defendant no.2, Indo Swiss Chemicals Limited, and the defendant no.3, Smith N Smith Chemicals Limited [hereinafter collectively referred as 'defendants'].

7.3. The defendants have been lawfully manufacturing and marketing weedicidal composition under the brand names 'RACER' and 'JODI No.1' comprising '*Clodinafop Propargyl 9%*' and '*Metribuzin 20% WP*' since June 2020, after obtaining registration under Section 9(4) of the Insecticides Act, 1968, on 8th May 2020. The aforesaid formulation does not contain any pigment, dyeing agent, or colouring substance, which the plaintiff has

explicitly claimed to be a novel and essential component of the suit patent.

7.4. The plaintiff's provisional specification dated 9th March 2010 did not specify any percentage composition and only asserted novelty in the combined use of *'Clodinafop and Metribuzin'*. In the Complete Specification dated 7th March 2011, the plaintiff claimed the inclusion of a dye to be essential to the invention for assisting farmers by visual identification of treated weeds. It is only in the plaintiff's response to the First Examination Report dated 7th February 2018 that the specific percentages were introduced.

7.5. In the absence of a 'dyeing agent or pigment' in the defendants' product, the composition differs substantially from the claimed invention and does not fall within the scope of the suit patent.

7.6. The order dated 9th January 2023 granting the suit patent was issued in the absence of pre-grant opponents as they did not receive a hearing notice.

7.7. Subsequently, HPMA became aware of the impugned order dated 9th January 2023 and immediately made a representation on 12th September 2023 seeking recall of the said order. With no response received, HPMA filed W.P.(C)-IPD 45/2023 before the High Court of Delhi, which was dismissed on 08th January 2024, with a liberty granted to HPMA to file a post-grant opposition. Pursuant thereto, HPMA has filed a post-grant opposition against the suit patent.

7.8. The suit patent lacks novelty and is obvious to a person skilled in the art. The suit patent does not result in a synergistic effect. The suit patent merely constitutes a combination of known substances, '*Clodinafop-Propargyl and Metribuzin*', along with excipients, which amounts to a mere admixture with no synergistic effect or enhanced efficacy.

7.9. Upon consideration of the combined teachings of prior art documents D1 to D10, it is evident that a person skilled in the art could easily derive the claimed composition, process, and method disclosed in the suit patent.

7.10. The present suit is filed to harass the defendants without any substantive legal basis. The allegations of patent infringement, irreparable loss, injury, or unjust enrichment are devoid of merit. The defendants' product is not identical to or does not fall within the scope of the claims of the suit patent. The plaintiff, in an attempt to establish infringement, has failed to undertake a fair and comprehensive comparison. The analysis selectively compares only three components: '*Metribuzin*', '*Clodinafop-Propargyl*', and presence of a '*safener*', while completely omitting the critical components that are essential elements of the suit patent, such as surfactants, pigments or dyes.

7.11. A case for infringement can only be established if each and every element of the claim is found in the impugned product. Since there is neither analysis nor comparison of these additional elements, which form part of the claimed invention in the suit patent, the plaintiff's assertion of infringement is untenable and unsustainable.

SUBMISSIONS OF THE PARTIES

8. Mr. Dayan Krishnan, Senior Counsel, appearing on behalf of the plaintiff, has made the following submissions:

8.1. The essential feature of the suit patent lies in the homogeneous wettable powder composition of two herbicides, '*Clodinafop Propargyl (9%) and Metribuzin (20%)'*, in a specific ratio of '1:2.2'. The 'dye or pigment' is merely an optional 'adjuvant/ excipient' and does not constitute an essential element of the invention.

8.2. The suit patent overcame the shortcomings of prior arts, which allegedly failed to disclose a homogeneous herbicidal composition with enhanced synergistic efficacy and also exhibited high phytotoxicity. The invention combines two herbicidal agents in a specific ratio to create an effective, low-phytotoxic, and safe formulation.

8.3. The specification and abstract do not present dye as an essential feature of the suit patent. The reference to 'dyeing agent or pigment' is only as another embodiment of the invention. It is described solely as an aid for illiterate farmers to assess coverage, without contributing to efficacy or addressing technical problems in prior art.

8.4. The defendants' own packaging and the analytical test reports submitted by the plaintiff confirm that the defendants' products comprise a composition of '*Clodinafop (9%) and Metribuzin (20%)*', which mirrors the composition claimed in the suit patent.

8.5. The defendants have consistently admitted, both in pleadings and affidavits, that the '*dyeing agent or pigment*' used in the composition is merely an excipient, additive, or adjuvant, and not an active ingredient. This admission is supported by:

a) Report of Mr. Ashish Kumar Chalna filed by the defendants along with I.A. 31208 of 2024 wherein the 'dyeing agent or pigment' is described as an 'adjuvant';

b) The defendants' post grant opposition also refers to the 'dyeing agent or pigment' as an excipient/additive and not as an active component.

8.6. The Controller, in the order dated 9th January 2023, has also addressed

and rejected the cited prior arts, holding that they do not disclose the claimed invention as to the specific combination and its synergistic effect.

8.7. The settled test in cases of patent infringement is whether the pith and marrow, i.e., the essential features of the claimed invention, are embodied in the allegedly infringing product. Reliance in this regard is placed on ***Sotefin SA* v. *Indraprastha Cancer Society & Research Center*[1], *UPL Limited* v. *Pradeep Sharma*[2]** and ***SNPC Machines (P) Ltd.* v. *Vishal Choudhary*[3].**

8.8. The absence of 'dyeing agent or pigment' is a minor and immaterial variation, and cannot be relied upon by the defendants to avoid a finding of infringement of the suit patent.

8.9. With regard to amendments made by the plaintiff during the prosecution, the contention of the defendants is untenable and misconceived for the following reasons:

a) The plaintiff was fully entitled to make amendments to the Claims under Section 59 of the Patents Act, 1970, and the said amendments were duly allowed by the Controller after examination. Pertinently, the defendants have not challenged the grant or validity of these amendments.

b) The amendment incorporating the content of dependent Claim 5 into Claim 1 does not in any way alter or expand the scope of the granted Claim.

8.10. The pre-grant examination process itself was conducted with rigour and due scrutiny by the Patent Office. The objections raised during that

[1] 2022 SCC OnLine Del 516
[2] 2018 SCC OnLine Del 7315
[3] 2024 SCC OnLine Del 1681

stage were comprehensively addressed, and the Controller dealt with all issues in detail in the order dated 9th January 2023. The Controller, in the said order, identified the inventive step in the suit patent as the specific ratio of 1:2.2 of the two active herbicidal ingredients i.e., '*Clodinafop Propargyl (9%) and Metribuzin (20%)*' and not any other aspect such as the presence of a 'dyeing agent or pigment'.

8.11. Defendants have failed to establish any credible or *prima facie* challenge to the validity of the suit patent, and the said issue needs to be determined during the course of the trial.

9. Mr. J. Sai Deepak, Senior Counsel appearing on behalf of the defendants, has made the following submissions:

9.1. The defendants' composition does not contain a 'dyeing agent or pigment', which is explicitly mentioned as an essential feature of the suit patent.

9.2. The plaintiff's case for infringement is untenable, as the defendants' Insecticide Act registration dated 8th May 2020 also does not mention dye as a component.

9.3. In the Complete Specification of the suit patent, it is stated that dye plays a crucial role in ensuring the visual homogeneity of the composition. The plaintiff's invention addresses the deficiencies in prior art by ensuring homogeneity in the weedicidal composition. The inclusion of dye is integral to achieving this uniform distribution of active ingredients, preventing lopsided dosages and reducing phytotoxicity. The manufacturing process highlights that dye is visually monitored to ensure uniformity.

9.4. The efficacy of the patented weedicidal formulation is directly impacted by the inclusion of dye. The plaintiff has highlighted that

traditional herbicides fail to provide a reliable visual indicator of their effectiveness on weeds. The dye assists in the visual identification of affected weeds. The plaintiff has explicitly stated that one of the primary objectives of the invention is to enable farmers to visually assess the effectiveness of the herbicide.

9.5. The excessive application of herbicide can cause phytotoxicity, damaging crops instead of only targeting weeds. The inclusion of a dye mitigates this risk by preventing unnecessary respraying. The farmers can visually identify treated areas and avoid over spraying, reducing the likelihood of overexposure to the herbicide. The plaintiff itself has acknowledged the issue of phytotoxicity in prior compositions and the benefits of homogeneity in reducing this risk.

9.6. The plaintiff has not disclosed any example of a composition without dye. All manufacturing processes disclosed in the suit patent involve the use of dye. There is no embodiment or claim suggesting an alternative composition without dye. Thus, dye is not an optional or auxiliary component but an integral part of the claimed invention.

9.7. The plaintiff is estopped from contending that 'dyeing agent or pigment' is a non-essential feature of the suit patent, as the amendments made during the prosecution of the suit patent clearly establish that dye or pigment is an essential element of the claimed invention. Reliance in this regard is placed on ***Pharma Tech Sols., Inc.* v. *LifeScan, Inc.***[4].

9.8. The plaintiff, in its reply to the First Examination Report, clearly distinguished the claimed invention from prior art D-1 by asserting the

[4] 942 F.3d 1372 (Fed. Cir. 2019)

inclusion of dye as a key feature. Reliance in this regard is placed on ***Ecomax Solutions (P) Ltd*. v. *Energeo Building Solutions LLP***[5].

9.9. In the post-grant opposition proceedings, the plaintiff consistently differentiated the suit patent from prior art specifically D-1, D-2, and D-3 stating that these documents did not disclose the use of 'dyeing agent or pigment'.

9.10. The plaintiff's claim of reduced active dosage in the suit patent composition is contradictory to the Table 1 given in the Complete Specification itself. Specifically, in Trial T-2, the actual applied dosage is 69.6 g/acre, which is higher than the 58.7 g/acre disclosed in prior art D-1 for the '*Clodinafop-Metribuzin*' combination (45 g + 100 g/ha). This directly contradicts the plaintiff's claim of dosage reduction. Both trials T-1 and T-2 utilise the same composition strength '*Clodinafop 9% and Metribuzin 20%*'; however, T-2 yields improved results due to an increased application quantity, not due to any synergistic effect.

9.11. The plaintiff has also failed to provide a comparison of the patented composition with separate tank mixes of '*Clodinafop and Metribuzin*' in equivalent amounts, a standard method for establishing synergy. Therefore, Table 1 does not substantiate any alleged synergistic interaction. Moreover, even the Controller's decision identifies the novelty as residing in the 1:2.2 ratio, however, this ratio is already disclosed in prior art D-1.

9.12. The suit patent lacks inventive step and is obvious to a person skilled in the art. The cited prior art documents demonstrate the absence of any inventive step. Therefore, the suit patent is liable to be revoked under

[5] 2023 SCC OnLine Del 2059

Section 64(1)(f) of the Patents Act, 1970.

ANALYSIS AND FINDINGS

10. Based on the analysis of the record and the submissions advanced on behalf of the counsel, the key question that arises for consideration in the present case is whether the 'dyeing agent or pigment' is an essential element of the suit patent.

11. From the claim mapping of the suit patent with the defendants' product, it is clear that the independent claims of the suit patent cover a 'dyeing agent or pigment', whereas the products of the defendants do not contain a 'dyeing agent or pigment'. Therefore, this is not a case where 'literal infringement' has been made out. Accordingly, this court has to see whether the infringement is made out on the basis of the 'Doctrine of Equivalents'.

12. In this regard, a reference may be made to the judgment of the Supreme Court of the United Kingdom in ***Actavis* v. *Eli Lilly***[6], wherein it was held that if there is no 'literal infringement', the Court has to consider 'infringement by equivalents'. It was held that in cases of involving 'infringement by equivalent products', the Court must assess questions, which are outlined in paragraph 66 of the judgment. The paragraph 66 of the judgment is given below:

> *"66. …While the language of some or all of the questions may sometimes have to be adapted to apply more aptly to the specific facts of a particular case, the three reformulated questions are as follows:*
>
> ***i) Notwithstanding that it is not within the literal meaning of the relevant claim(s) of the patent, does the variant achieve***

[6] [2017] UKSC 48

substantially the same result in substantially the same way as the invention, i.e. the inventive concept revealed by the patent?

ii) ***Would it be obvious to the person skilled in the art, reading the patent at the priority date, but knowing that the variant achieves substantially the same result as the invention, that it does so in substantially the same way as the invention?***

iii) ***Would such a reader of the patent have concluded that the patentee nonetheless intended that strict compliance with the literal meaning of the relevant claims of the patent was an essential requirement of the invention?***

In order to establish infringement in a case where there is no literal infringement, a patentee would have to establish that the answer to the first two questions was 'yes' and that the answer to the third question was 'no'.*"*

[Emphasis is mine]

13. From a plain reading of the above extracted paragraphs, it is clear that to prove a case for infringement of a patent, both the first two questions have to be answered in the affirmative, and only if the answers to the first two questions are in the affirmative, the test will proceed to the third question.

14. As per the question ***(i)***, the Court has to look into the aspect whether the defendant's product or variant achieves the same result in substantially the same way as disclosed in the 'inventive concept' of the suit patent. For this determination, it is essential to analyse the 'inventive concept' underlying the suit patent.

15. In ***Edwards* v. *Meril***[7], the High Court of England and Wales, following the judgment in ***Actavis*** (supra), had gone into the question of

[7] [2020] EWHC 2562 (Pat)

how to identify the 'inventive concept' or the 'inventive core' of a patent. The relevant observations of the Court in ***Edwards*** (supra), with regard to question ***(i)*** of ***Actavis*** (supra), are as follows:

> "*222. Also relevant is that in Icescape* ***v*** *Ice-World [2018] EWCA Civ 2219 the Court of Appeal considered how to approach the first Actavis question (which the court called the first Improver question). Kitchin LJ at paragraphs 58-67 explained that part of what is required to answer it is to identify what is the "inventive concept" or "inventive core" of the patent:*
>
> > *"The first Improver question, whether the variant has a material effect on the way the invention works, was addressed by Lord Neuberger at [60]. He thought this was generally satisfactory but* ***the court must focus on "the problem underlying the invention", "the inventive core", or the "inventive concept". In effect the question is whether the variant achieves the same result in substantially the same way as the invention****".*
>
> *223.* ***In other words one should examine what is the problem underlying the invention and how does the patent solve that problem.*** *Since it will be necessary to deal with the inventive concept when addressing equivalents, I will address equivalents after addressing obviousness.*"
>
> [Emphasis is mine]

16. A similar approach was followed by the Division Bench of this court in ***FMC Corporation* v. *Natco Pharma Ltd.***[8]. The Division Bench observed that in order to assess patent infringement under the 'Doctrine of Equivalents', it is necessary to first ascertain the essential features and scope of the claimed invention. The relevant extracts are set out below:

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[8] 2022 SCC OnLine Del 4249

> "***31.*** *The doctrine of equivalents has been accepted in the jurisprudence to protect patent rights from being infringed by infringers using colourable method of making some minor, insubstantial variations to escape the reach of the patent. The doctrine of equivalents, in essence, seeks to address infringers who introduce minor variations as subterfuge to defeat patent rights.* ***The doctrine is applied to ascertain whether there is an infringement by excluding any insubstantial, minor or trivial changes that are designed to deprive the patentee of the benefits of his invention.***
>
> ***32.*** *The doctrine of equivalents is applicable only in cases where the variation or difference between the product or process and the patented claim is insignificant, insubstantial and not essential to the patented claim.* ***In order to determine whether, on the basis of doctrine of equivalents, a product or process infringes the patent, it is essential to determine the essence and scope of the patent. It is important to understand as to what is the invention that is patented.*** *If the invention is infringed by a product or process, the minor differences in the non-essential trappings of the product or process would be irrelevant.*"
>
> [Emphasis is mine]

17. In ***FMC* v. *Natco*** (supra), the Division Bench was considering the issue whether 'Sulfonyl Chloride' was an essential element of the suit patent therein or not. In the said case, the Single Judge had held that 'Sulfonyl Chloride' was an essential element of the suit patent and hence, did not grant the interim injunction in favour of the plaintiff.

18. After analysing the claims with the Complete Specification of the suit patent therein, the Division Bench in ***FMC* v. *Natco*** (supra) came to the conclusion that 'Sulfonyl Chloride' has been specifically covered in the independent claim 1 and was extensively described in the Complete Specification. Since there was no indication to the contrary, the Court accepted that 'Sulfonyl Chloride' was as an essential feature of the

'inventive concept' of the suit patent therein. (*Refer: paragraph 38*). Based on the aforesaid analysis, the Division Bench upheld the judgment of the Single Bench, denying the grant of an interim injunction.

19. In light of the legal position elucidated by the aforesaid judgments, it can be safely inferred that the Complete Specification plays an important role in determining the 'essential features' and the 'inventive concept' of a patent. To determine the underlying problem that existed in the prior art and the manner in which the same is sought to be solved by the 'inventive concept' of the suit patent, the Court shall be required to examine the complete specification, claims as well as the prosecution history of the suit patent.

Complete Specification along with Claims

20. Firstly, a reference may be made to the part of the Complete Specification titled '***Background of the Invention***'. The following problems that existed in the prior art have been identified in the '***Background of the Invention***' section:

I. Lack of Homogeneous Synergistic Compositions:
   a. Though combinations of herbicides can result in synergistic effects, such combinations are not common and come with limitations.
   b. No homogeneous compositions with enhanced synergistic effects are disclosed.
   c. Most known compositions are heterogeneous wettable powders, which lead to uneven distribution.

II. Ineffectiveness and Phytotoxicity Due to Heterogeneity:

a. Heterogeneous mixtures result in lopsided dosages, leading to:
    i. Ineffective weed control.
    ii. Phytotoxicity in crops when in excess.

III. Poor Adherence to Weed Surface:
    a. Existing herbicides do not adhere well to the weed surface.
    b. This causes the dilution of the herbicide's effect, reducing its efficacy.

IV. <u>No Visual Mechanism to Assess Effectiveness:</u>
    a. <u>It is difficult to visually assess the herbicide's effectiveness after application.</u>
    b. <u>There's a lack of a direct, visible indicator of herbicide activity in the field.</u>

V. Inadequate Control of Specific Weeds in Wheat:
    a. These issues are particularly problematic in controlling common wheat weeds like *Phalaris minor*, *Avena fatua.*

21. It is clear from the aforesaid that one of the problems attempted to be solved by the suit patent was the difficulty in visually assessing or determining the effectiveness of the applied herbicides on the weeds (See point IV above). The relevant extract from the section titled '***Background of the Invention***' is given below:

> *"...*
> *Also, upon application of the herbicides on the crop**<u>, it is difficult to directly and visually assess or determine the effectiveness of the applied herbicides on the weeds. Thus, it is always desired to have some direct</u>***

mechanism to easily check the effectiveness of the herbicide upon its application on the field.*"*

[Emphasis is mine]

22. Next, a reference may be made to the section titled '***Objects of the Invention***'. The section titled '***Objects of the Invention***' in the Complete Specification is reproduced below given below:

"***The main object of the present invention is to provide a herbicidal composition which overcomes some or all of the problems associated with the prior art as identified above****.*

Accordingly, one of the objects of the present invention is to provide a herbicidal composition which is highly effective in low dosage amounts.

Yet another object of the present invention is to provide a homogeneous composition the wettable powder form of the herbicide.

Another object of the present invention is to provide a method for preparation of a homogenous composition of herbicide in the wettable powder form.

Still another object of the present invention is to provide a herbicidal composition which could directly adhere to the surface of the weeds.

Yet another object of the present invention is to provide a herbicidal composition whose application and effect on the weeds could be directly and visually assessed.

Another object of the present invention is to provide a herbicidal composition which is highly effective against weeds in wheat crop especially weeds such as Phalaris minor and Avena fatua.

The other objects and preferred embodiments and advantages of the present invention will become more apparent from the following description of the present invention when read in conjunction with the accompanying examples, figures and tables, which are not intended to limit scope of the present invention in any manner."

[Emphasis is mine]

23. From a reading of the aforesaid, the main objects of the invention can be summarised below:

a) To provide a herbicidal composition that is highly effective in low dosages, thereby reducing chemical load and potential side effects.

b) To provide a homogeneous composition in wettable powder form, ensuring uniform distribution of active ingredients.

c) To provide a method for the preparation of a homogeneous wettable powder herbicide, suggesting a process innovation.

d) To develop a herbicidal composition that can directly adhere to the surface of weeds, improving retention and efficacy.

e) <u>To enable visual assessment of the herbicide's effect, allowing for easy, on-field monitoring of weed control.</u>

f) To offer a composition that is particularly effective against wheat crop weeds, especially *Phalaris minor*, *Avena fatua*.

24. Clearly, one of the objects of the invention is to provide a composition whose application and effect on the weeds could be directly and visually assessed.

25. In the section of the Complete Specification titled '***Detailed Description of the Invention***', it is stated as under:

> "*In another preferred embodiment of the present invention, a suitable dye is used in manufacturing the composition such that its dyeing property helps in identifying the weeds affected by the composition. Thus, the use of the dye in manufacturing the composition helps illiterate farmers in assessing the effectiveness of the composition on weeds.* ***<u>Upon use of the composition, the affected weed acquires a particular colour, depending upon the dye</u>***. ***<u>Accordingly, an embodiment of the invention is its unique dyeing property</u>***."
>
> [Emphasis is mine]

26. A plain reading of the extracts from the Complete Specification makes it clear that the purpose of the 'dyeing agent or pigment' is to identify

the weeds and therefore, it helps farmers in assessing the effectiveness of the composition of the weeds. Emphasis has been laid on the fact that dyeing property is one of the unique concepts of the invention.

27. Now, I would refer to the two Claims of the inventions, both of which are independent claims. The same are set out below:

> *"I A homogenous wettable powder composition comprising herbicidally effective amount of prop-2-ynyl(R)-2-[4-(5- choloro-3- 2-pyridyloxy) phenoxy] propionate 9% WP and 4-amino-6-tert-butyl-4, 5-dihydro-3-methylthio-1,2,4- triazine-5-one 20% WP, a surfactant,* ***a dyeing agent*** *or a pigment, and a safener.*
>
> *II A method for preparing the homogenous wettable powder composition as claimed in claim 1, the method· comprising the steps of:*
>
> *a. Stirring and heating the surfactant at about 50°C;*
> *b. Adding the safener at the temperature of about 50°C and mixing for about 15 minutes;*
> *c. Adding prop-2-ynyl(R)-2-[4-(5-chloro-3-nuoro-2-pyridyloxy) phenoxyl propionate slowly & mixing for about 20 minutes while maintaining the temperature at about 50°C to 55°C;*
> *d. Adding 4-amino-6-tert-butyl-4,5-dihydro-3-methylthio-1,2,4-triazin-5-one slowly & mixing for about 20 minutes while maintaining the temperature at about 50°C to 55°C;*
> *e. Adding suspending, wetting & dispersing agent to the above mixture and mix for about 20 minutes maintaining the temperature at about 50°C to 55°C to form the Master solution;* ***adding the dyeing agent at the temperature of about 50°C to 55°C and stirring for about 10 minutes****;*
> *f. Spraying the Master solution upon the high absorbable ppt silica by applying air pressure of about 1 Kg/cm^2 through jet nozzle;*
> *g. Stirring the sprayed mass in moisture-less environment to avoid any hygroscopic effect for about 15 minutes and then blend for about l hour; and*
> *h. Grinding the mass for desired mess size and blend again to obtain free flowing powder wherein the prepared composition as a homogenous wettable amorphous composition."*
>
> [Emphasis is mine]

28. A perusal of the above would show that the 'dyeing agent or pigment' is a part of both the independent claims, claim 1, which is a product claim and claim 2, which is a method claim.

29. At this juncture a reference may be made to Chapter 5 titled '***Provisional and Complete Specification***' of the '***Manual of Patent Office Practice and Procedure'***, (version 3.0) dated 26th November, 2019 (hereinafter the 'Manual'), wherein under the head 5.03.17 titled '***Structure of Claims***', it is clarified that the independent or principal claim must clearly define the essential features of the invention. The relevant extract is given below:

> *"**r) The first claim is always an independent claim also known as 'Principal Claim'. It should clearly define the essential features of the embodiment(s) of the process/product that constitutes the invention. The claim should be properly characterized with respect to the 'prior art', defining all the technical features essential to the invention or inventive concept. The claim should bring out sufficient details of interrelationship and/or operation to establish that the invention achieves the intended objectives**."*
>
> [Emphasis is mine]

30. A reference may also be made to Section II.A.3.2 titled '***Indication of All Essential Features***', under the broader heading '***Clarity of Claims***' in the Case Law of the Boards of Appeal of the European Patent Office (10th Edition, 2022)[9]. The relevant extract is given below:

> "*According to the established case law of the boards of appeal Art. 84 EPC has to be interpreted as meaning not only that a claim must be comprehensible from a technical point of view, but also that it must*

[9] EPO, Case Law of the Boards of Appeal, II.A.3.2 – Essential Features of the Invention, 10th ed. (2022), available at https://www.epo.org/en/legal/case-law/2022/clr_ii_a_3_2.html

define the object of the invention clearly, that is to say indicate all the essential features thereof. ***An independent claim should explicitly specify all essential features needed to define the invention*** *(G 1/04, OJ 2006, 334).* ***All features which are necessary for solving the technical problem with which the application is concerned have to be regarded as essential features;*** *see on this issue T 32/82, OJ 1984, 354 and T 115/83, confirmed inter alia in T 269/87; T 409/91, OJ 1994, 653; T 694/92, OJ 1997, 408; T 1055/92, OJ 1995, 214; T 61/94; T 488/96; T 203/98; T 260/01; T 813/03; T 1540/12; T 2427/13; T 1180/14; T 30/16; T 2291/15; T 874/16; T 110/21. The indication of all essential features is seen as necessary to meeting the clarity requirement.*"

[Emphasis is mine]

31. The position that emerges from a reading of the above extracted paragraphs is that the independent or principal claim of a patent must include all features essential to define the invention. The essentiality of a particular feature in the patent is also confirmed if it solves a particular problem identified in the prior art.

32. Relying on the judgment of Supreme Court in ***Biswanath Prasad Radhey Shyam* v. *Hindustan Metal Industries***[10], a Co-ordinate Bench of this Court in ***Ecomax Solutions (P) Ltd.* v. *Energeo Building Solutions LLP***[11] has observed that in an infringement proceeding, the Complete Specification of the suit patent is sacrosanct. Once the plaintiff has itself identified features that are essential to the suit patent in the Complete Specification, it is estopped from contending that they are not essential so as to make out a case of infringement. It was further observed that the plaintiff is bound by what the plaintiff itself claimed to be inventive.

[10] (1979) 2 SCC 511
[11] *supra* note 5

33. In the present case it is clear from an analysis of the Complete Specification, including the Claims that the presence of the 'dyeing agent or pigment' is not merely incidental. Rather it serves a specific functional purpose, i.e., to enable visual identification of treated areas, and once such a feature is explicitly claimed, in absence of a clear disclaimer, it must be treated as integral to the inventive concept.

34. Therefore, from a conjoint reading of the Complete Specification along with the Claims, *prima facie*, I cannot agree with the submission of the plaintiff that the 'dyeing agent or pigment' does not constitute an essential element of the invention. Having framed the independent Claims 1 and 2 to include the 'dyeing agent or pigment' as part of the solution to a practical problem, the plaintiff is bound by the same. The 'dyeing agent or pigment', being part of the independent claims and serving a specific purpose, must be treated as an essential element of the suit patent.

Prosecution History

35. Now, I shall examine the prosecution history of the suit patent.

36. In the Complete Specification filed on behalf of the plaintiff on 7th March, 2011, the 'dyeing agent or pigment' was only included in the dependent claims, i.e., claims 5 and 8 and not in the principal claim 1. For ease of reference, the claims in the Complete Specification filed on 7th March, 2011, are set out below:

> *"1. A composition comprising herbicidally effective amount of prop-2-ynyl(R)-2-[4-(5- chloro-3-fluoro-2-pyridyloxy) phenoxy] propionate and 4-amino-6-tert-butyl-4,5- dihydro-3-methylthio-1,2,4-triazin-5-one.*
> *2. A composition as claimed in claim 1, wherein the said composition is in a wettable powder form.*

3. *A composition as claimed in claim 1, wherein the said composition is a homogenous composition in a wettable powder form.*
4. *A composition as claimed in claim 1, wherein the said composition further comprising a surfactant.*
5. ***A composition as claimed in claim 1, wherein the said composition further comprising a dyeing agent or pigment.***
6. *A composition as claimed in claim 1, wherein the said composition further comprising a safener.*
7. *A method for preparing the composition as claimed m claim I, the method comprising the steps of:*
    a. *Stirring and heating the surfactant at about 50°C;*
    b. *Adding the safener at the temperature of about 50°C and mixing for about 15 minutes;*
    c. *Adding prop-2-ynyl(R)-2-[4-(5-chloro-3-nuoro-2-pyridyloxy) phenoxyl propionate slowly & mixing for about 20 minutes while maintaining the temperature at about 50°C to 55°C;*
    d. *Adding 4-amino-6-tert-butyl-4,5-dihydro-3-methylthio-1,2,4-triazin-5- one slowly & mixing for about 20 minutes while maintaining the temperature at about 50°C to 55°C;*
    e. *Adding suspending, wetting& dispersing agent to the above mixture and mix for about 20 minutes maintaining the temperature at about 50°C to 55°C to form the Master solution;*
    f. *Spraying the Master solution upon the high absorbable ppt silica;*
    g. *Stirring the sprayed mass for about 15 minutes and then blend for about l hour; and*
    h. *Grinding the mass for desired mess size and blend again to obtain free flowing powder.*

    wherein the prepared composition is a homogenous wettable amorphous composition.
8. ***A method as claimed in claim 7, wherein a dyeing agent is added to the said Master Solution at the temperature of about 50°C to 55°C and stirred for about 10 minutes.***
9. *A method as claimed in claim 7, wherein the said Master Solution is sprayed on high absorbable ppt silica by applying air pressure of about 1 Kg/cm^2 through jet nozzle.*
10. *A method as claimed in claim 7, wherein the sprayed and blended mass is grinded in moisture-less environment to avoid any hygroscopic effect.*
11. *A homogenous wettable amorphous composition comprising herbicidally effective amount of prop-2-ynyl(R)-2-[4-(5-chloro-3-fluoro-2-pyridyloxy)*

phenoxy] propionate and 4-amino-6-tert-butyl-4,5- dihydro-3-methylthio-1,2,4-triazin-5-one as obtained by the method as claimed in claim 7."

[Emphasis is mine]

37. Further, in the independent claim 1, there was no percentage of the concentration of the active ingredients that has been mentioned. In the First Examination Report (hereinafter the 'FER') issued by the Controller on 30th May 2017, objections were taken on behalf of the Controller with regard to lack of novelty, inventive steps and non-patentability of the suit patent.

38. In reply to the FER, the plaintiff amended claim 1 to include the composition percentages. However, 'the dyeing agent or pigment' continued to be in the dependent claims 5 and 8.

39. It was only in the post-hearing written arguments filed on 17th September, 2018, to overcome the objections raised by the Controller, the plaintiff merged the dependent claims 2 to 6 and claims 8 to 11 with the independent claims 1 and 2, respectively. Therefore, the amended claims 1 and 2 have to be asserted as a whole and not on a piecemeal basis. The plaintiff, at this stage, cannot be heard to say that the 'dyeing agent or pigment' was not an essential part of the suit patent.

40. A post-grant opposition was filed on behalf of one of the pre-grant opponents. The plaintiff, in its reply to the post-grant opposition dated 8th April 2024, while differentiating prior art D-1, took a stand that D-1 does not disclose the 'dyeing agent or the pigment'. The relevant extracts from the reply filed by the plaintiff to the post-grant opposition are set out below:-

"***Further, D1 only generically discloses the surfactant and safener. It is important to note that there is no disclosure of the dyeing agent or pigment in D1***."

[Emphasis is mine]

41. A similar stand was taken by the plaintiff while differentiating prior art D-2 and D-3.

42. In ***Jay Switches India (P) Ltd. v. Sandhar Technologies Ltd.***[12], I had referred to ***Terrell on the Law of Patents, 20th Edition***, to conclude that prosecution history acts as an important aid towards the construction of the claim. The relevant paragraph no. 41 of judgment is set out below:

> "*41. As per Terrel on the Law on Patents 20th Edition, the prosecution history acts as an important aid towards the construction of the claim. The relevant extract from Terrel is set out below:*
>
> > *"The US doctrine of "file wrapper estoppel", under which statements made by or on behalf of the patentee during the course of prosecution may be taken as binding on issues of construction, does not exist as such under English law.* ***However, in Furr v Truline, Falconer J. accepted a submission that statements made by the patentee in the Patent Office file amounted to an admission against interest, so that it was not open to them to contend for a wider construction thereafter. (It should also be noted that in that case it was the patentee itself which originally put the documents in evidence, a matter regarded by Falconer J. as significant)****."*
>
> *[Emphasis supplied]*"

43. Based on the above legal position and after examining the entire prosecution history in the said case, the Court came to the conclusion that

[12] 2024 SCC OnLine Del 8434

the stand of the plaintiff in the said case, at the stage of prosecution was at variance with the case set up in the plaint. Hence, the interim injunction was denied.

44. Mr. J Sai Deepak, Senior Counsel appearing on behalf of the defendants, has correctly relied upon the judgment of the United States Court of Appeals, Federal Circuit, in ***Pharma Tech Sols., Inc.* v. *LifeScan, Inc.***[13], in support of his submission that the prosecution history would apply as an estoppel for purposes of infringement analysis. The relevant extracts from the said judgment are set out below:

> "***Prosecution history estoppel applies as part of an infringement analysis to prevent a patentee from using the doctrine of equivalents to recapture subject matter surrendered from the literal scope of a claim during prosecution."*** *Trading Techs. Int'l, Inc. v. Open E Cry, LLC, 728 F.3d 1309, 1322 (Fed. Cir. 2013).* ***Prosecution history estoppel can occur in two ways: "either (1) by making a narrowing amendment to the claim ('amendment-based estoppel') or (2) by surrendering claim scope through argument to the patent examiner ('argument-based estoppel')." Conoco, Inc. v. Energy & Envtl. Int'l, L.C., 460 F.3d 1349, 1363 (Fed. Cir. 2006).***
>
> ***With respect to amendment-based prosecution history estoppel, the Supreme Court has recognized that a "patentee's decision to narrow his claims through amendment may be presumed to be a general disclaimer of the territory between the original claim and the amended claim."*** *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722, 740 (2002). The presumption may be overcome if the patentee can show the applicability of one of several exceptions identified by the Supreme Court: (1) the equivalent was "unforeseeable at the time of the application"; (2) "the rationale underlying the amendment*

[13] *supra* note 4

may bear no more than a tangential relation to the equivalent in question; Id. At 740-41"

[Emphasis is mine]

45. In the course of arguments, it has been submitted on behalf of the plaintiff that the 'dyeing agent or pigment' is an optional element of the plaintiff's invention. However, nowhere during the course of the prosecution history, the plaintiff has taken a stand that the 'dyeing agent or pigment' is an optional element.

46. In my *prima facie* view, the plaintiff, having obtained the suit patent on the basis of the uniqueness of the invention on account of *inter-alia* the presence of the 'dyeing agent or pigment', the plaintiff cannot now take a contrary stand. The plaintiff cannot be allowed to approbate and reprobate.

47. Accordingly, the first ***Actavis*** (supra) question**,** whether the variant achieves substantially the same result in substantially the same way as the invention, must be answered in the negative. The absence of the dyeing agent in the suit patent alters not only the formulation but also the very objective and utility of the invention. Therefore, in view of the absence of 'dyeing agent or pigment' in the defendants' product, in my *prima facie* view, infringement by equivalence is not made out in the present case.

48. The plaintiff has claimed that the defendants have admitted in post-grant opposition proceedings, as well as the expert report of Mr. Ashish Kumar Chalna that the 'dyeing agent or pigment' is an 'adjuvant'.

49. According to Merriam-Webster Dictionary, the term 'adjuvant' is defined as "*an ingredient (as in a prescription or a solution) that modifies the action of the principal ingredient*." In the present suit, the novelty of the suit patent is claimed on the basis of specific concentration and ratio of the

combination of active ingredients, along with the inclusion of 'adjuvants' that confer the enhanced properties claimed by the invention. Although 'adjuvants' are not principal ingredients per se, it is pertinent to note that they play a crucial role in augmenting the effect of the principal ingredients. Therefore, the aforesaid argument does not advance the case of the plaintiff.

50. The plaintiff has relied upon the following judgments in support of its submissions that in cases of patent infringement, the pith and marrow of the invention must be tested to see whether the essential elements of the suit patent are infringed or not:-

i. ***Sotefin SA* v. *Indraprastha Cancer Society & Research Center***[14]

ii. ***UPL Limited* v. *Pradeep Sharma***[15]

iii. ***SNPC Machines (P) Ltd.* v. *Vishal Choudhary***[16]

51. In ***Sotefin*** (supra), the defendant's product included 17 out of 19 elements of Claim 1. After analysing the report of independent Scientific Advisors, the Court concluded that the infringement could still be made out under the 'Doctrine of Equivalents' as the omitted elements in the defendant's product therein were not found to be essential by the Scientific Advisors for achieving the central purpose of the invention. The judgment cannot come to the aid of the plaintiff, as in the present case, the 'dyeing agent or pigment' is an essential part of the suit patent and is not present in the defendants' products. Further, in ***Sotefin*** (supra), the Court had the

[14] *supra* note 1
[15] *supra* note 2
[16] *supra* note 3

benefit of report and opinion of independent Scientific Advisors, which is not there in the present case.

52. In ***UPL*** (supra), the dispute pertained to an agrochemical formulation in which the allegedly infringing product lacked a 'stabilizer' component. The Court found that the 'stabilizer' was not an essential element of the claim based on the finding that the absence of the 'stabilizer' did not affect the functioning of the said formulation. The 'stabilizer' was not shown to contribute materially to the solution proposed by the invention. In the present case, the 'dyeing agent or pigment' as explicitly claimed, performs a specific function, and is directly tied to one of the objectives of the suit patent and the problem identified in the prior art as referred to in the Complete Specification.

53. In ***SNPC*** (supra), the Court examined whether the defendant's mobile brick-making machine infringed the plaintiff's patent. The Court held that the pith and marrow of the invention was the integration of the brick-making assembly onto a mobile frame, enabling continuous and organised brick laying. Even though the defendant's machine lacked an in-built mobility mechanism, as the defendant's machine relied on external vehicles, the core function of the invention, i.e., mobile brick laying, was nonetheless achieved. Hence, the Court concluded that there were no fundamental alterations in the defendant's machine, and a case for infringement was made out. Unlike ***SNPC*** (supra), in the present case, the function intended by the invention cannot be fully achieved at all if the 'dyeing agent or pigment' is omitted. Without it, the composition no longer solves the problem it intended to address, i.e., ensuring visible application for effective use.

54. Both sides have filed expert reports, affidavits, along with scientific journals in support of their submissions, with regard to the relevance and significance of the 'dyeing agent or pigment' in a weedicide. The veracity of the rival claims, including expert reports, affidavits and scientific journals, can be determined at the stage of the trial.

55. The defendants have also made submissions with regard to the invalidity of the suit patent and have filed a counterclaim, seeking revocation of the suit patent. The defendants have attacked the validity of the suit patent on account of novelty and inventive steps. However, in view of my clear finding on the aspect of non-infringement, I do not propose to examine the issue of validity of the suit patent at this stage. The validity of the suit patent would also have to be tested at the stage of the trial.

56. At this interim stage, the Court is only required to take a *prima facie* view based on the submissions of the parties and the material placed by them. The Court is not required to conclusively determine every element of the dispute or resolve contested issues of fact. Doing so would essentially convert the interim hearing into a mini-trial. In my *prima facie* view of the present case, the contentions raised by the defendants raise material questions that warrant a full trial.

CONCLUSION

57. In view of the discussion above, I am of the *prima facie* view that dyeing agent or pigment cannot be termed as a non-essential element of the suit patent. The plaintiff has highlighted the advantages derived on account of the presence of 'dyeing agent or pigment' in its invention. Accordingly, based on the discussion above, the plaintiff has failed to make out a *prima facie* case for the grant of an injunction.

58. Balance of convenience is also in favour of the defendants and against the plaintiff. Irreparable injury and undue hardship would be caused to the defendants if the interim injunction is granted in favour of the plaintiff company. In the event the plaintiff succeeds at the time of final adjudication of the suit, the plaintiff can be compensated by way of damages.

59. Accordingly, the application for the grant of interim injunction is dismissed. However, it is directed that the defendants shall maintain complete accounts of the manufacture and sale of the impugned products and file the statement of accounts on a half-yearly basis.

60. Needless to state that the observations made herein are only for the purpose of deciding the present applications and shall have no bearing on the final outcome of the suit and the counter claim.

CS(COMM) 196/2024, CC(COMM) 28/2024, I.A. 5256-5257/2024 & I.A. 8792/2024

61. List the suit and counterclaim along with pending applications before Joint Registrar on 30th July, 2025.

AMIT BANSAL
(JUDGE)

MAY 07, 2025
at