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Outline of 'Novartis AG V. Union of India & Others' with reference to the Concept of Evergreening of Patents and Section 3 (D) of the Indian Patents (Amendment) Act, 2005

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ABSTRACT

Novartis International AG is the world's leading pharmaceutical and healthcare company based in Basel, Switzerland who filed a patent application (1602/ MAS/ 1998) for its anti-cancer drug Gleevec in India. But the patent application of Novartis was rejected by Indian Patent Office, Madras High Court, Intellectual Property Appellate Board and finally by Apex Court of India as it was hit by Section 3(d) of the Patent Act, 1970 which prevented this pharmaceutical company from evergreening their drug in India by making minute changes to the already known patented product. This landmark case by elaborating the scope of Section 3 (d) of Indian Patent (Amendment) Act, 2005 halted attempts of pharmaceutical giants to evergreen their drugs and sell them at high price. This judgment also backed various Indian pharmaceutical manufacturers and distributors to make availability of generic version of anti-cancer drugs at affordable price for the people living in developing nation like India.

I. TIMELINE OF THE CASE

Year 1993: Getting Patent for a free base Imatinib around the world.

Novartis filed patents worldwide for a free base **Imatinib** (an oral anti-cancer drug which act against cancer cells) but Novartis did not patent Imatinib in India because during that time (i.e., in 1993), Indian Patent System had no provision for providing patent protection to Pharmaceutical and Agrochemical products. In other words, the act only included Process Patent as a patentable subject matter.

Year 1998: Filing a patent application for the Drug Gleevec before Madras Patent Office

On July 17, 1998 Novartis then filed a patent application (1602/ MAS/ 1998)[2] before the

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Madras Patent Office (claiming Switzerland priority date July 18, 1997)[3] for a new form this free base Imatinib specifying the counterion /specific salt i.e., commercially called as Imatinib Mesylate. In easier words, when methane sulfonic acid was added to this existing salt form, it ends up becoming Imatinib Mesylate.

This new form of product was a beta crystalline version of one of the salts, Imatinib i.e., Imatinib Mesylate. This anti drug aimed at treating chronic myeloid leukaemia (CML) and Gastrointestinal Stromal Tumour (GIST) and Novartis named this invention of an anti-cancer drug as Gleevec (brand name for the drug name Imatinib Mesylate).

However, Novartis disclosed only four physical attributes as to how the current form of beta version is different from the precursor (alpha version of the Imatinib Mesylate) of the current version, which are as follows:

1. The beta crystalline version of Imatinib Mesylate had a 30% increase in bioavailability (the percentage of the drug absorbed into the bloodstream) when compared to the Imatinib (the precursor of the current version of the drug Gleevec).[4]
2. The beta crystalline version of Imatinib Mesylate is thermodynamically more stable at room temperature than the precursor.[5]
3. The beta crystalline version of Imatinib Mesylate is less hygroscopic than the precursor alpha crystal form of the methane sulfonic acid addition salt.[6]
4. The beta crystalline version of Imatinib Mesylate has lower hygroscopicity which adds to another advantage for processing and storing the methane sulfonic acid addition salt to the beta crystalline form.[7]

On July 17th, 1998 due to unavailability of granting Product Patent in India, Novartis filed a mailbox application due to the unavailability of patenting product patent in India.

What is Mailbox Application?

"In intellectual property, refers to the requirements of the TRIPS Agreement applying to WTO members which do not yet provide product patent protection for pharmaceuticals and

[2] *Novartis AG v. Union of India & Others,* Civil Appeal Nos. 2706-2716 of 2013 arising out of SLP (C) Nos. 20539-20549 of 2009, *Natco Pharma Ltd., v. Union of India & Others,* Civil Appeal No. 2728 of 2013 arising out of SLP (C) No. 32706 of 2009, *M/s Cancer Patient Aid Associations v. Union of India & Others,* Civil Appeal Nos. 2717-2727 of 2013 arising out of SLP (C) Nos. 12984-12994 of 2013, SLP (C)……../2011 CC Nos. 6667-6677 *available at:* https://main.sci.gov.in/jonew/judis/40212.pdf .
[3] *Id.*
[4] *Id.*, at p.no. 87.
[5] *Supra*
[6] *Supra*
[7] *Supra*

for agricultural chemicals. Since, January 1, 1995 when the WTO agreements entered into force, these countries have to establish a means by which the applications of the patents for these products can be filed. (An additional requirement says they must also put in place a system for granting 'exclusive marketing rights' for the products whose patent applications have been filed)"[8]

In layman language, in 1995 after India's entry into WTO, if any company files for patent for a particular product for which patent cannot be granted under the Indian Patent Act, 1970, then that particular patent application will be kept in the mailbox so that it would be considered later.

So, when no patent was granted to any product patent at the time as India had no provisions to grant patent for pharmaceutical products, the application filed by Novartis for the grant of the Patent Gleevec, Novartis went as 'mailbox application' so that this application for the grant to patent to the drug Gleevec can be considered later.

Provided that these developing nations like India should allow a system to grant exclusive marketing rights (temporary right to sell, distribute or manufacture the product until the company gets patent for that product) for its product whose patent applications have been filed.

Year 1999: When Indian Patent Act 1970 was amended to comply with Article 70.8 and 70.9 of TRIPS Agreement

Section 5(2) of the Act[9] was added to address Mailbox Application which provides for filing of a patent application in the area of pharmaceutical drugs, medicines and agrochemicals. Chapter IVA[10] was also added to introduce Exclusive Marketing Rights in Indian Patent System to comply with the provisions of TRIPS Agreement[11].

But all patent applications were taken out of mailbox for consideration only after the amendments which were made in the Patent Act w.r.f. January 1, 2005. In other words, these applications were kept on hold in the mailbox till December 31, 2004 under the law.[12]

However, the company can seek Exclusive Marketing Rights to sell, distribute and protect the

[8] WTO Glossary, *available at:* https://www.wto.org/english/thewto_e/glossary_e/mailbox_e.htm (last visited on April 16, 2022).
[9] The Patents (Amendment) Act, 1999, s. 5(2), *available* at: https://wipolex.wipo.int/en/text/207195 .
[10] The Patents (Amendment) Act, 1999, s. 24A - 24F, *available* at: https://wipolex.wipo.int/en/text/207195 .
[11] The Agreement on Trade-Related Aspects of Intellectual Property Rights, 1995, *available* at: https://www.wto.org/english/res_e/publications_e/ai17_e/trips_art70_jur.pdf .
[12] *Id., Novartis AG v. Union of India & Others,* Civil Appeal No. 2706-2716 of 2013, *available at:* https://main.sci.gov.in/jonew/judis/40212.pdf .

product. The obligation of TRIPS to grant exclusive marketing rights was only for developing countries like India where they did not grant patents for pharmaceutical products before the amendment of 2005.

Meanwhile, in 2001, Novartis was granted Exclusive Marketing Rights from USFDA (United States Food and Drug Administration) to treat myeloid leukaemia by commercially launching the drug in the market by the name Gleevec.

Year 2002: Novartis started its Gleevec anti-cancer drug donation program in India

Novartis started to distribute its drug Gleevec in India to certain cancer patients who were unable to afford the medicine but they also concluded this program after Indian Drug Manufacturers began to produce generic version of Gleevec.

Year 2003: Indian Patent Office granted EMR to the drug Gleevec

On March, 2002 Novartis made application for the grant of Exclusive Marketing Rights (EMR No. EMR/ 01/ 200) and on November 10, 2003 Novartis received EMR for Gleevec by Indian Patent Office under Section 24A of the Act following which:

1. Gleevec was marketed in India as well.
2. To cease Indian Manufacturers who were manufacturing generic version of the anti-cancer drug, Gleevec.
3. To raise the cost/ price of the drug almost ten- fold.

But this EMR acted as a patent monopoly as it prevented Indian Pharmaceutical companies from producing affordable generic versions of Imatinib Mesylate plus it was an expensive drug when compared to Indian Standards.

In 2003, Natco Pharma Ltd., India also challenged the Novartis EMR before the Court but in 2004, Delhi High Court dismissed the Natco application against Novartis EMR. Therefore, all the local producers of generic versions of Imatinib Mesylate like Ranbaxy, Cipla, Sun Pharma, Hereto and Shanta Biotech were forced to withdraw the production and court halted these local companies from selling Gleevec copies.

Year 2005: Indian Patents (Amendment) Act, 2005 added Section 3(d); started granting patents on pharmaceutical products; abolition of EMRs and pre-grant opposition was filed to the Controller of Patents against the grant of patent to Novartis

India entered the WTO (World Trade Organisation) and in order to be in compliance with the provisions of the TRIPS Agreement, on April 4, 2005, Section 5 of the Indian Patent Act,

1970 was repealed and two major amendments were made in Section 2 and 3 of the Patents (Amendment) Act, 2005. Product Patents were also included in Patentable Subject Matter along with Process Patents. The Indian Patent (Amendment Act) 2005 defines what invention is and makes it clear that any existing knowledge or thing cannot be patented by declaring that novelty, non-obviousness/ inventive step and industrial applicability are three pre-requisites for 'patentability'. In other words, the Amendment Act of 2005 restricted frivolous patents.

However, due to the amendments made in the Indian Patent Law, the application made by Novartis was taken out of mailbox and taken into consideration. But on May 26, 2005 M/s Natco Pharma Ltd., India[13], on July 5, 2005 Cipla Ltd.[14], on August 22, 2005 Hetero Drugs Ltd.[15] and on September 26, 2005 Cancer Patient Aid Association (CPAA)[16] filed an application of opposition under Section 25(1) of the Act and rule 55 of Patent Rules, 2003 as amended by the Patent (Amendment) Act 2005. The Cancer Patients Aid Association which provides assistance to poor and unprivileged cancer patients, played a massive role under section 25(1) of Indian Patent Act, 1970 for pre-grant opposition against Novartis by stating several grounds as to why patent should not be granted to Novartis for its drug name Gleevec.

These five-pre-grant opposition was filed before Madras Patent Office on grounds such as:

1. Lack of Novelty [Not an invention under Section 2 (1) (j)]
2. Disclosure vs. Claimed
3. The claimed salt did not added efficiency under section 3(d) i.e., the drug Gleevec does not exhibit any major changes in "*therapeutic effect*" over its pre-existing form.
4. Obviousness [Anticipation by Prior Publication under Section 2 (1) (l)]
5. Wrongful Priority

Therefore, Assistant Controller of Patents at Madras Patent Office rejected the Indian patent application of Novartis on the grounds, which are as follows:

[13] *Novartis AG vs. Natco Pharma Ltd.,* Trademark Tribunal, January 25, 2006, *available* at: https://indiankanoon.org/doc/1352538/ .
[14] *Novartis AG vs. Cipla Ltd.,* Trademark Tribunal, January 25, 2006, *available at:* https://indiankanoon.org/doc/1740470/ .
[15] *Novartis AG vs. Hetero Drugs Ltd.,* Trademark Tribunal, January 25, 2006., *available* at: https://indiankanoon.org/doc/1629598/ .
[16] *Novartis AG vs. Cancer Patients Aid Association*, Trademark Tribunal, January 25, 2006, *available at:* https://indiankanoon.org/doc/994049/ .

a. It lacks novelty and inventiveness as Imatinib Mesylate is one of the salt forms of the free base Imatinib and Novartis already claimed all form of salts of Imatinib in its 1993 patent.

b. The disclosed information that Imatinib Mesylate had a 30% increase in bioavailability (the percentage of the drug, absorbed into the bloodstream as compared with the precursor), it is thermodynamically more stable at room temperature or having lower hygroscopicity than the precursor, the Madras Patent Office asserted the drug being insufficient to meet the "*enhanced efficacy*" requirements of Section 3(d) of the said Act.

c. Section 3(d) of Indian Patent Act, 1970

As per the Act, Section 3(d) is described as *"the mere discovery of* ***a new form of known substance*** *which does not result in the* ***enhancement of the known efficacy*** *of that substance or the mere discovery of any new property or new use for a known substance or of the mere use of a known process, machine or apparatus unless such known process results in a new product or employs at least one new reactant, is not patentable."*[17] So, it restricts any product which does not qualify the efficacy criteria or which is not have a genuine improvement. In layman terms, it restricts any grant of patent for "incremental innovation" (those inventions which does not create a new product but make minor improvements to what already exists) unless they provide with the therapeutic advancement to its pre-existing form.

d. The invention of the drug is obvious and anticipated by prior publication as it is just a free base which is chemically modified into a salt form and Imatinib Mesylate is already a known substance from prior publication.

e. The patent application was rejected on the grounds that Novartis itself agrees with the contention of the opponents that this application wrongly claims priority. The application was filed in India on July 17, 1998 as a convention application claiming Swiss priority whereas Switzerland was not a convention country on that date. Hence, this application is legally and technically disqualified and deserve to be rejected. Novartis said that the priority date is only a facility provided to them to avoid anticipation by publication of the invention between priority date and the filing date in India. It was a discretion of the Novartis to claim priority.[18]

[17] The Patents (Amendment) Act, 2005, s. 3(d).
[18] *Id.*, at p.no. 8.

Hence, the Controller of Patents at Madras Patent Office held that the patent application of Novartis for Imatinib Mesylate under the brand name Gleevec, is not patentable as it is not an invention under Section 3(d) of the Act.

Year 2006: Madras Patent Office refused to grant the Patent Application to Novartis; **Novartis challenged this before Madras High Court against the order of Controller of Patents.**

In 2006, IPAB existed but was not in action (brought into force by Ministry of Commerce and Industry on April 2, 2007) so when the patent application was rejected by the Controller of Patents at Madras Patent Office, Novartis moved two writ applications against Union of India, Controller of Patents and opponents who challenged a pending application prior to grant of patent before the Madras High Court under Article 226 of Indian Constitution.

The first writ petition was against the order of Madras Patent Office who rejected Novartis patent application for the grant of patent to its anti-cancer drug, Gleevec. Hence, Novartis appealed before the court to direct Controller General of Patent and Trademark to allow their patent application.

The second writ was regarding Section 3(d) of Indian Patent Act, 1970 that the Controller has made error in interpreting the enhanced efficacy standard rooted in Section 3(d) of Indian Patent Act. Novartis challenged the constitutional validity of Section 3(d) of the Act by arguing that the Section 3(d) of the act (municipal law) of the Act is unconstitutional as it is not in compliance with TRIPS (international treaty). Novartis also contemplated that this section is ambiguous and violative of Article 14 of Indian Constitution.

Year 2007: Madras High Court dismissed Novartis writ petitions, pronounced its decision on the issue of constitutional validity of section 3(d) of the Act and directed Novartis to appeal against the decision of Controller before Intellectual Property Appellate Board (IPAB)

Meanwhile, the Central Government constituted patent tribunal (IPAB) and issued notification under section 117G of the act wherein "*all the cases of appeals against any order or decision of the Controller ..... shall be transferred to the Appellate Board*"[19] but before transferring the case to IPAB, Madras High Court reserved its right to confer its judgment on the issue of constitutional validity of Section 3(d) of the Act.

Elaborating Section 3(d): "A new form of known substance" and "enhancement of the known

[19] The Patents Act, 1970, s. 117G.

efficacy"

The court while explaining as to why Section 3(d) of the Act is not arbitrary, asserted that if there would be no increment (enhancement) of the known efficacy (effectiveness), then the said product is not patentable under the act as Section 3 of the Act is all about the inventions which are not patentable. [20]

The Madras High Court highlighted the term "efficacy" that if a new form of a known substance does not result in enhancement of the known efficacy, then it will not be treated as an invention. The court further explained the term "efficacy" by quoting that "*if the discovery of a new form of a known substance must be treated as an invention, then the patent applicant should show that the substance so discovered has a better therapeutic effect. Darland's Medical Dictionary defines the expression "efficacy" in the field of Pharmacology as "the ability of a drug to produce desired therapeutic effect" and "efficacy" is independent of potency of the drug. Dictionary meaning of "therapeutic" is "healing of disease having a good effect on the body". Going by the meaning for the word "efficacy" and "therapeutic" extracted above,* ***what the patent applicant is expected to show is, how effective the new discovery made would be in healing a disease/ having a good effect on the body.*** *In other words, the patent applicant is definitely aware as to what is the "therapeutic effect" of the drug for which he had already got a patent and what is the difference between the therapeutic effect of the patented drug and the drug in respect of which patent is asked for."*[21]

The court implied that the invention should demonstrate a significant improvement in efficiency. Therefore, more or significant increase in efficacy (effectiveness) means better healing of a disease (effectiveness in healing a disease) or more success in treatment.

Let's understand from an illustration: Illustration No. 1, where 'A' company got a patent for a drug name 'ABC' in which a patient should take 2 pills for 8 days to fully recover from a particular disease.

Illustration No. 2, where 'A' company (or any other company) files a patent application to grant patent for a drug claiming that in order to fully recover from that particular disease the patient have to take only 2 pills for 7 days.

The reason behind the latter one will not get patent because it focuses on the problem of

[20] *Novartis AG vs. Union of India,* W.P. Nos. 24759 & 24760 of 2006, *available* at: https://indiankanoon.org/doc/266062/ .

[21] *Novartis AG vs. Union of India,* W.P. Nos. 24759 & 24760 of 2006, *available* at: https://indiankanoon.org/doc/266062/ .

Evergreening Pharmaceutical Patent.

Evergreening of Drug Patent: A business strategy to get further twenty years of patent protection just by doing some minor modifications to what already exists

A company who has patent protection for a product makes a minor or minute changes to that particular product and again file for patent application before the expiry of period of twenty years, such that their product do not fall into public domain. And when that particular product is not falling into public domain then the company will be the patent owner of that particular product over and over again. Hence, this section restricts pharmaceuticals companies who makes minor modifications to the prior art (what already exists/ published) and demonstrates them as a new medicine just to get further twenty years of patent protection. This section also helps Indian pharmaceutical manufacturers and distributors to sell their generic version of drugs to us easily with affordable and less price.

The problem of evergreening of patent is not just limited to India but in other developing countries around the world. So, this section puts a restriction on this problem of evergreening of pharmaceutical drugs.

Madras High Court concluded its decision and transferred the case to IPAB

The court also refused to entertain the writ petitions by asserting that the said high court has no jurisdiction to determine whether Section 3(d) of the act (municipal law) is contrary to TRIPS (international treaty) or not. Hence, court dismissed Novartis petition and transferred the case to IPAB as per the provision under Section 117G of the Act.

Year 2008: Novartis challenged the order of Controller before Intellectual Property Appellate Board

In order to reverse the order of Controller, Novartis contended all five grounds of appeal before IPAB, which was rejected by IPAB on these four grounds in 2009, which are as follows:

1. Anticipation
2. Section 3(d) of the Act
3. Obviousness
4. Priority

Year 2009: IPAB upheld the rejection of Novartis patent application by Controller of Patents; Novartis filed Special Leave Petition before Supreme Court under Article 136

of Indian Constitution

The tribunal observed the followings while rejecting the appeal before IPAB:[22]

1. The invention satisfies the tribunal that the beta crystalline version of Imatinib Mesylate is novel and possesses inventive step. It qualifies the requirement of valid patent under section 2 (1) (j) of the Act. Therefore, the tribunal was satisfied by way of inventive selection. However, IPAB agreed with the Controller of that it is hit by Section 3(d) of the Act and upheld the rejection of patent application by the Controller of Patents as the Novartis failed (on account of efficacy requirement) to show any actual enhancement of known efficacy.

2. The tribunal also asserted that bio-availability is not same as therapeutic efficacy. Hence, Novartis cannot make its own assumption as the only kind of efficacy which satisfies section 3(d) of the Act is "therapeutic efficacy".

   The tribunal held that Novartis beta crystalline version of precursor drug Imatinib might have improved bioavailability, thermodynamic stability, improved blood flow properties and lower hygroscopicity but this will lead nowhere as the appellant never had any startling object to improve therapeutic efficacy to treat cancer or anything which amount to an increase in "*therapeutic efficacy*".

3. IPAB while defending the constitutional validity of Section 3 (d) quoted from Madras High Court judgment that "*the amending act wanted to achieve namely, to prevent evergreening; to provide easy access to the citizens of the country to life saving drugs to discharge their constitutional obligations of providing good healthcare to its citizens."*[23]

4. The court also observed that Novartis through programme distributed Gleevec free of cost to cancer patients but when Novartis received exclusive marketing rights to sell and distribute Gleevec in Indian Market then it started charging Rs. 1,20,000/- per month for required dose which will have tragic effect on society due to unaffordable prices. Hence, petition was disposed off.

Novartis filed Special Leave Petition before Supreme Court in the same year under Article 136 of Indian Constitution and laid issues before the court, which are as follows:

1. Known substance under Section 3(d) of the Act.

[22] Dorothy Du, *Novartis AG v. Union of India: "Evergreening," Trips and "Enhanced Efficacy" Under Section 3(d),* 21 J. INTELL. PROP. L 223 2014.
[23] *Id.,* at p.no. 11.

2. Enhancement of known efficacy under Section 3(d) of the Act.
3. Does improved Bio availability of drug qualifies as increase in therapeutic efficacy?
4. The current version of Imatinib Mesylate has more efficacy than the precursor substance or not.

Year 2013: When battle came to an end – Supreme Court rejected the Novartis patent application

Supreme court while highlighting the term "efficacy" under section 3 (d) of the act, refused to grant patent to the Gleevec. The following statements were laid down before disposing off the case:

1. The beta crystalline version of Imatinib Mesylate is a new but modified version of precursor which already existed before in an alpha form (Novartis's 1993 patent for Imatinib before US Patent Office).
2. When it comes to medicines, efficacy means *"therapeutic efficacy"*. The court held that the product which is beta crystalline version of Imatinib Mesylate does not qualify the test laid by Section 3(d) of the Act. Thus, Section 3(d) prohibits patent protection to those pharmaceutical products which are presented before the Patent Office with minor modifications but that does not mean that Section 3(d) of the Act bars all the incremental inventions of pharmaceutical products. The court quoted that "*what is "efficacy"? Efficacy means "the ability to produce a desired or intended result"..... In other words, the test of efficacy would depend upon the function, utility or the purpose of the product under consideration. Therefore, in the case of a medicine that claims to cure a disease,* ***the test of efficacy can only be "therapeutic efficacy".***[24]
3. The court also laid down as to what would be the parameter of therapeutic efficacy that are taken into account while determining the enhancement of therapeutic efficacy. The court quoted that *"the text added to Section 3(d) by 2005 amendment lays down the condition of "enhancement of known efficacy". The explanation requires the derivative to "differ significantly in properties with regard to efficacy". What is evident therefore, is not is that not all advantages or beneficial properties are relevant but only such properties that directly relate to efficacy, which in case of medicine as seen above, is its therapeutic efficacy.....it must also be kept in mind*

[24] *Id.,* at p.no. 90.

that each of the different forms mentioned and explanation have some property inherent to that form, e.g., solubility to a salt and hygroscopicity to a polymorph. These forms, unless they differ significantly in property with regard to efficacy, are expressly excluded from definition of "invention". ***Hence, the mere change of form with properties inherent to that form would not qualify as "enhancement of efficacy" of a known substance.....the explanation is meant to indicate what is not to be considered as therapeutic efficacy."***[25]

4. The court laid out that India being a developing nation should get medicines at reasonable price unlike Gleevec whose cost is Rs. 1,20,000/- per month for the required dose. The court asserted that this drug might be beneficial for cancer patients but it must prove or demonstrate that it has more efficacy than the precursor substance (which Novartis failed to provide to the court).
5. The court also remarked that if any invention does not fulfil the criteria of Section 3(d) of the Act, then it is considered incapable to be patentable under the act as the objective of the clause was to prevent the concept of evergreening.

II. CONCLUSION

This landmark judgment impacted both domestic and international discussions (especially in developing nations) on rejecting patent to those new form of existing medicines unless they demonstrate in significant increase in therapeutic efficacy and this clause of section (what is not an invention) prevented the worldwide famous Swiss Pharmaceutical company to obtain monopoly over the Imatinib Mesylate marketed under the brand name Gleevec in India.

The apex court also highlighted that Section 3(d) of the Act reduces the abuse of big pharmaceutical giants in developing country like India, to sell their life saving drugs at such high price which creates havoc among general public. So, in order to protect the right to life of people, this historic case created a space for Indian Local Pharmaceutical Companies to manufacture and sell generic version of life saving drugs at affordable price.

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[25] *Id.,* at p.no. 91.