
DIGITIZING SCENTS: COMPARATIVE ANALYSIS OF REGISTRABILITY AND THE FUTURE OF OLFACTORY TRADEMARKS IN INDIA

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ABSTRACT

The Development of trademark law has gradually incorporated non conventional marks such as shapes, colors, sounds and smell, where smell acts as a unique way to identify products and services. Globally the acceptance of scent marks varies under the US law “Lanham Act” governs the registration of smell marks, while the EU follows strict seven-fold test established in the precedent case. In India sections 2(1)(zb) and 2(1)(m) of the Trade markings Act, 1999, along with Rules 2(1)(k), 23, and 26 of the Trade Marks Rules, 2017 state that smell marks are nearly impossible to register in India as the law requires permanent graphical representation. Notably Smell marks are not expressly prohibited and there is no precedent to address their registrability. This leads to paradox since color and sound marks are recognized, smell remain unexplored despite being their capacity to influence consumer perception, psychology and brand loyalty. This paper investigates the reasons behind India’s ongoing refusal to acknowledge olfactory trademarks, exploring the legal, institutional, and representational hurdles that maintain this conservative stance. Scent can be objectively recorded by using Electronic Nose, scentography, and neuroscientific techniques like EEG which qualify for proper recognition of smell identity. India can protect olfactory trademarks and prepare its intellectual property system for future developments by applying scientific methods to address representation, uniqueness, and enforcement concerns.

Keywords: Olfactory, Trademarks, EEG, Electronic nose

I. Introduction

A trademark is a type of intellectual property that helps that helps customer recognize the source of goods or services protects the owners from copying and prevents the consumer confusion. Trademarks cover logos, symbols, signs and names but increasing competition has led to recognition of non-conventional marks, including sounds, shapes, colours, and scents.¹ Memory and emotion are impacted by the smell. The olfactory bulb is directly connected to the brain system which controls emotion and memory the Proust effect demonstrates how smells can immediately evoke intense emotions.² This strong psychological link strengthens and treats scents as potential brand identifier. According to section 2(zb) of the Trade mark Act 1999, marks must be capable of distinguishing goods or services and should be graphically represented.³ This definition does not explicitly exclude olfactory marks but graphical representation has hampered the registration. Similarly smell marks are not prohibited under Article 15 TRIPS provided it should be distinctive, non functional and reproducible. Globally countries like US and EU have taken steps to recognize olfactory trademarks. Certain industries such as perfumes, healthcare and consumer products increasingly relying on scent for brand identity, the issues concerning olfactory trademark is becoming more significant and relevant in India.

II. Review of literature

1.Rishi Vardhan KT, Gokul Priya N [2024] The Viability of Smell Mark: Challenges in Registration and Enforcement volume 6, issue 6 ⁴

This paper examines challenges in registration and enforcement of olfactory trademarks, emphasizing the need for distinctiveness and non-functionality. Graphical representation requirements make registration difficult. This paper recommends certain solutions like chemical formulas, chromatograms, descriptive prose, and physical samples have been proposed to overcome the difficulty of using graphical representation for trademarks. The US and EU cautiously accept scent marks but demand stringent proof, often using the Sieckmann test. Indian law remains restrictive, and researchers recommend adopting global best practices and technological tools to facilitate registration.

2.Apoorva BN, (2020), legal status of olfactory marks under the trademark law regime, NLUA journal of intellectual property rights, vol1. Iss 2. Pp 37-48⁵

This paper discusses the legal status of olfactory marking under the framework of trademark law, with particular emphasis on difficulties and issues related to their protection. In *Re Celia Clarke* USA allowed the registration of scent marks based on secondary meaning under section 2(f) Lanham Act provided scent is non-functional and has acquired distinctiveness whereas EU and Indian trademark laws hampered by strict graphical representation. This paper concludes that India should reform its Trademark Act by removing the graphical representation and allow broader protection of scent marks.

¹EspieAngelicaA.deLeon,TheUnconventionalitiesofNon-TraditionalMarks,AsiaIPLaw(May31,2025), <https://asiaiplaw.com/article/the-unconventionalities-of-non-traditional-marks>.

²Smell and Memory: The Proust Phenomenon, BPS (Apr. 27, 2021), <https://www.bps.org.uk/psychologist/smell-and-memory-proust-phenomenon>.

³TradeMarks Act, No.47of1999, §2(1)(zb)(India)

⁴RishiVardhanK.T.&GokulPriyaN., The Viability of Smell Mark: Challenges in Registration and Enforcement, 6 Int'l J. Multi discip. Res. 1 (2024).

3.Pooja Kulkarni (2022), smell as a trademark: its registrability and challenges in India and other countries, international journal for legal research & analysis, Vol 2. Iss 6.⁶

The paper explores the challenges in registering smell marks as trademarks, highlighting the strict graphical representation requirement under Indian law. It notes that international treaties and conventions offers no clear guidance, complicating global registration of scent marks. And highlighted the need for legal recognition of non-conventional marks. Clearer guidelines should be provided for registration of non-conventional marks in international conventions. This would reduce confusion regarding registration.

4. M.P. Ram Mohan, Pratistha Agarwal (2025), The Proustian Predicament in Trademark Law: Charting the Legal Recognition of Olfactory Marks, IIMA Working paper No.2025-08-01.⁷

This paper studies the evolving status of olfactory trademarks and how it persuades the consumers in the contemporary trademark jurisprudence. It offers a foundational explanation of olfactory trademark and analyses their applicability by reviewing its precedents across countries such as US, EU, Australia. The study aims to conceptualize a workable framework by broadening the scope of Indian Trademarks act,1999 to accommodate scent marks to ensure the compliance with TRIPS agreement. The authors proposed hybrid model for olfactory marks that combines verbal description, chemical formula, and sample deposition to overcome the graphical representation barrier.

⁵ApoorvaB.N., Legal Status of Olfactory Marks Under the Trademark Law Regime,1 NLUAJ. Intell. Prop. Rts. 37 (2020).

⁶PoojaKulkarni, Smell as a Trademark: Its Registrability and Challenges in India and OtherCountries,2 Int'l J. Legal Rsch. & Anal. 1 (2022)

⁷M.P. RamMohan &PratisthaAgarwal, The Proustian Predicament in Trademark Law: Charting the Legal Recognition of Olfactory Marks, IIMA Working Paper No. 2025-08-01 (2025).

The model, inspired by Australia and supported by US evidentiary standards, ensures clarity while demanding proof of distinctiveness. Literature also cautions that functional and natural scents must be excluded to avoid monopolization.

5. Tejaswini Kaushal (2023) Law and ‘Odor’: Establishing a Case for Olfactory Marks in Indian IP Landscape, *Part I*, NLIU CSIPR.⁸

This Article discusses the fundamental concept of olfactory trademarks and the requirements for qualifying as a trademark. The author discovers that, despite its limited legal protection in India, Smell plays a significant impact in customer perception and brand identification due to its capacity to evoke memories. Reviewing global developments, including the US, EU, and UK, the article highlights both successes in scent mark recognition and obstacles such as the strict graphical representation requirement under *Sieckmann* in the EU. The author suggests a possible solution based on international practices that India could adopt to enhance its trademark framework and emphasize the need for adapting to the digital scent technology.

6. Prerana Das and Oishee Banerjee (2021), A Comparison of Laws on Olfactory Marks vis-a-vis the National and the International Sphere, *International journal of legal science and Innovation*, Vol.3 Iss 6; 86⁹

This Paper explores the scope of Trademark protection worldwide and discusses how innovation and progress in the field of trademarks invites the need for registration of non-conventional mark especially smell. The authors reviewed the varied perspectives of different countries in registering a smell mark and examined their feasibility. It also discusses the global evolution of scent markers distinctive to nations like United States and the United Kingdom. This paper involved the critical study of smell mark registration by discussing the reasons for and against its registrability.

I. Research problem

Indian trademark law does not explicitly prohibit registering olfactory trademark. One of the

⁸TejaswiniKaushal, Law and ‘Odor’: Establishing a Case for Olfactory Marks in Indian IPL and scope, Part I, NLIU CSIPR (2023).

⁹PreranaDas&Oishee Banerjee, A Comparison of Laws on Olfactory Marks Vis-à-Vis the National and the International Sphere, 3 Int’l J. Legal Sci. & Innovation 86 (2021).

primary challenges is to prove that smell is distinctive and should not be functional and should be in form of graphical representation. Furthermore, due to the complexity and international standards (TRIPS, WIPO), a unique standalone law for olfactory marks is not feasible. This research problem focuses on current issues with registering smell marks and explores viable solution within the existing laws. However new technological advancements such as digital scent recording and electronic nose system present potential solution to this problem, but their feasibility from legal and practical perspective has not yet been explored in India.

II. Research Hypothesis

If olfactory marks were to be recognized in India, the trademark system would need to evolve with the greater clarity and flexibility to enable protection to non-conventional marks as well.

Integrating smell marks within existing trademark framework, supported by advanced technologies like electronic nose system, scentography and digital scent recordings alongside transparent policy guidelines would encourage inventive branding while ensuring the transparent and predictable system of trademark protection.

III. Research Objective

Objective of this research paper is to analyze the non-conventional trademark especially with regard to olfactory trademark focus on challenges in registering the trademark. Conduct a comparative study of legal and procedural framework in US, UK and EU for olfactory trademark registration and evaluates how functionality doctrine is major hindrance for registering olfactory marks. The research aims to investigate issues related to registration and enforcement of scent mark.

IV. Research question

1. What challenges arise in perception, graphical representation and distinctiveness for registering scent marks?
2. What is the legal status of smell marks in India and other countries like EU, US?
3. Whether emerging technologies will be helpful for identifying the distinctiveness of smell marks in India?

V. Research Methodology

The researcher has undertaken doctrinal research. The legislation and precedent cited were taken from reliable sources. Researcher primarily used qualitative method of research.

VI. Scope and limitation

Understanding the concept and legal status of scent marks in India. Comparing India's framework with international practices [US, EU] and analyzing relevant precedents to highlight the difficulties and success in registering scent marks. In India there is no practical implementation or testing of technologies such as electronic nose system for scent mark registration. International comparison does not look at market impact or economic usage instead they focus on legal framework.

VII. Trademark

Before Understanding the Meaning of trademark; it is indispensable to begin with definition of mark as it constitutes the basis upon which the concept of trademark is built. Section 2(1)(m) of the Trade Mark act, 1999 defines —mark includes a device, brand, heading, label, ticket, name, signature, word, letter, numeral, shape of goods, packaging or combination of colours or any combination thereof; "The definition of 'mark' reflects the legislative intent of the Act to adopt a broad and inclusive approach, thereby ensuring sufficient flexibility to include both conventional and non-conventional forms of marks."¹⁰ Building upon this the concept of Trademark, being the type of Intellectual property defined under Section 2(1) (zb) of the Trade mark act, 1999 "trademark means a mark capable of being represented graphically and which is capable of distinguishing the goods or services of one person from those of others and may include shape of goods, their packaging and combination of colors¹¹; This definition is exhaustive in nature and thereby limits the scope only to those marks which are capable of being graphically represented.

¹⁰Trade Marks Act, No.47 of 1999, §2(1)(m) (India)

¹¹ Ibid

Having Understood the meaning and scope of trademark it may now be classified into two broad categories; Conventional and non-conventional trademarks. The conventional trademarks mean the traditional forms of marks includes word, logos, symbols, numerals, brand names and label that are visible and easy to represent graphically. The main feature of the conventional mark is that it can be depicted in written or visual form. On the other hand, the unconventional trademarks refer to modern trademark forms such as smell, sound, taste, texture, motion which is often difficult to perceive visually and represent graphically.¹²

VIII. Olfactory Marks:

An Olfactory mark is the type of non-conventional marks that relate to scents or smells. These smell marks have the strong tendency to influence the minds of consumers as they are closely connected to memories and emotion. This Notion of smell shaping the minds of consumers is reinforced by the Proust phenomenon named after Marcel Proust's novel **“Remembrance of Things Past”** which suggests that certain smell or flavour has the power to trigger vivid memory and autobiographical cues.¹³ Consequently, Olfactory trademarks aids trade by enabling the consumers to distinguish goods or services with ease, thereby backing a strong and lasting brand associations and loyalty. **World Intellectual Property Organization’s (“WIPO”)** Standing Committee on the Law of Trademarks, Industrial Designs and Geographical Indications identified ‘olfactory trademarks’ as a novel type of mark; identifying their potential for distinguishing goods and services. Depending on particular kind of product they relate to scent marks may be classified into three groups, namely

1. **“Primary scent markings”** constitutes deodorants, perfumes and other items that emanate scents designed solely for the purpose of dispersing scents and consists of no other functions.
2. **“Secondary scent markings”** “are those that includes Soaps, body washes, serums, air fresheners, detergent powders, cleansing agent etc., where the fragrances is a secondary attribute but nonetheless, it serves a key role.

¹²Tushar Singh Samota, The Trade Marks Act, 1999, I Pleadings Blog (Nov.30,2022), <https://blog.ipleaders.in/the-trade-marks-act-1999/>

¹³C.Verbeek&C. VanCampen, Inhaling Memories: Smell and Taste Memories in Art, Science, and Practice, 8 Senses & Soc’y 133 (2013).

3. “**Unique scent markings**” refers to items that uses scent in a deliberate and distinct way to identify and distinguish goods or services in the market place. It helps consumers to associate the product with the particular brand only using smell. For example, an embroidery thread for which trademark is provided under In Re Celia Clarke case.¹⁴

IX. Legal status of Registering Olfactory Marks in India

Olfactory trademark's legal status in India is still underdeveloped and ambiguous. Scent marks do not explicitly prohibit under Trademark Act 1999. To register scent marks in India, two essential conditions are required: they are distinctiveness and graphical representation. As of now scent marks have not been registered by Indian Trade Marks Registry. One of the fundamental obstacles for registering olfactory marks is that it should be in form of graphical representation using sophisticated technological methods. **Zippo Manufacturing Company v. Anil Moolchandani case (2011)**,¹⁵ Delhi high court held that Zippo lighter can be protected as shape mark under Indian trademark law and court reinforced that if product design is distinctive and if the brand name or shape largely connects with people then it can be protected as non-conventional trademark. This case establishes as a precedent and court may eventually permit the registration of non-conventional marks in India. Recently Kempe Gowda International Airport in Bengaluru has brought a fragrance in airport called **Dancing bamboo** where such fragrance makes travelers to feel more comfortable and pleasant feel. This fragrance is used as sensory branding.¹⁶ Indian companies have already began using unique scent marks as branding tool but it is not legally protected under the Indian Trademark law due to legislative framework. To identify as a scent mark it should be distinctive in nature. This concept has been connected with Section 34 trademark Act which safeguards the rights of people¹⁷ who has been used as mark and

¹⁴Apoorva B.N., Legal Status of Olfactory Marks Under the Trademark Law Regime, INLUAJ.Intell. Prop. Rts. 37 (2020).

¹⁵Zippo Mfg.Co. v. Anil Moolchandani, 2011 SCC Online Del 4562

¹⁶Express News Service, Bengaluru's Kempe Gowda International Airport Introduces Signature Fragrance to Enhance Passenger Experience, The Indian Express (July 31, 2025), <https://indianexpress.com/article/cities/bangalore/bengaluru-kempegowda-international-airport-introduces-signature-fragrance-10161284/>

¹⁷Trade Marks Act, No.47 of 1999, §34(India)

courts focus on ownership rather than just registration. This paper examines three main issues such as distinctiveness, graphical representation and functionality doctrine and challenges in registering scent marks in India.

X. Challenges in Registering Scent marks in India

1. Distinctiveness

Indian Trademark Act uses distinctiveness as the threshold criterion for registering scent mark. The term distinctiveness describes a trademark's special capacity to identify the source of product or services. Section 9 and 11 of Trademark Act, which deals with the absolute and relative ground of refusal for trademark registration in India, serves to evaluate a brand's distinctiveness. For a scent mark to be distinctive the smell must be unique, serves no functional use and should be immediately linked with certain brands in the eyes of consumer. The distinct features of product allow customers to find even if they can't remember the name of the brand. For a smell to qualify as trademark it must be distinctive and such smell should not be acquired from natural smell of the product itself. **Cadila Healthcare Ltd v Cadila Pharmaceuticals Ltd (2001)**¹⁸the court held that descriptive words cannot be registered under trade mark act unless it must acquire some secondary meaning and brand name in the market. There are two types of distinctiveness they are a) Inherent distinctiveness b) acquired distinctiveness

a) Inherent Distinctiveness

Inherent Distinctiveness refers to ability of a mark to immediately and naturally differentiate the products or services of one business from those of another without the need for evidence of prior use or consumer recognition. According to Indian trademark Act 1999, a mark cannot be considered inherently distinctive in India if it violates Section9(1)(a) -(c)'s prohibition¹⁹. Inherent distinctiveness refers to the prima facie originality or uniqueness of a mark. Inherent distinctiveness becomes extremely problematic when applied to scent marks.

i. Barrier of Natural characteristics

Since it describes a natural feature of the product smell that is inherent to the product such as

¹⁸Cadila Health care Ltd. Cadila PharmaceuticalsLtd.,2007SCCOnLineDel6381(Del.)

¹⁹Trade Marks Act, No.47of 1999, §9(1)(a)-(c)(India)

smell of grass, smell of tea leaves cannot be consider as inherently distinctive because it directly describes natural attribute of the product.

ii. Artificial Scents

Smell needs to be completely non-functional and unnatural to the product in order to be acquired inherently distinctive. This indicates that smell serves to distinguish the product's place of origin rather than being a necessary component of their use, quality or purpose.

b) Acquired Distinctiveness

The term acquired distinctiveness refers to the psychological connection that normal customers have formed over a time between a brand and the origin of goods or service. Descriptive marks or non-distinctive cannot be registered under section 9(1) of Trademark Act 1999. However, proviso to section 9(1) and 32 creates an exception, a descriptive mark may still be registered if it has acquired distinctiveness by the time of the registration application. This section indirectly deals with acquired distinctiveness. A mark may be eligible for registration even if it lacks inherent distinctiveness if it has been used exclusively or for a longer period of time and if it causes a consumer to directly associate it with single source. Acquired distinctiveness can be established through use of the scent, period of time, consumer surveys, data collection, market sales etc. **Re Celia Clarke 1990** smell of fresh flowers for sewing thread is registered as scent mark in US such protection was granted because of acquired distinctiveness and it shows how consumer closely associate with that product.²⁰ In India the Dancing bamboo fragrance at Bengaluru Airport even such smell makes travelers to feel more comfortable and pleasant this shows how smell can have acquired distinctiveness. But it is difficult to prove secondary meaning because the applicant must prove that people recognize product only by smell without needing any symbol or name.

2. Graphical representation

The term Graphical representation is defined under rule 2(1)(k) of the Trademark Rules, 2017. It states that "graphical representation" means the representation of a trademark for goods or

²⁰ re Clarke, 17 U.S.P.Q.2d 1238, 1239 (T.T.A.B. 1990).

services represented or capable of being represented in paper form and includes representation in digitized form; Therefore, for a mark to be registered as a trademark it must be capable of being visually depicted in a clear, precise and permanent form either in paper or in digitalized form and understood objectively by the public and authorities. Requirement of Graphical Representation is a sine qua non for registering trademark in India under section 2(1)(zb) of Trademarks Act, 1999, But smell marks could not meet this requirement as they cannot be graphically represented as required under Rule 2(1)(k).²¹ It is practically impossible to represent the smell in paper or digitalized form as there is no international standard to represent the smell unlike colors and music which can be represented by Pantone system and Musical notes respectively. It is to be noted that representing a smell through chemical formula will not accurately depict the actual odor or sensory experience of its smell, rather it only indicates the molecular structure of a substance. Thus, making it difficult for the public or the authorities to understand what scent is being protected.²² Likewise giving a description for scent did not serve the purpose as it remains subjective and largely influenced by personal perceptions such as age, gender, health and environment etc., with no common or universal standard that is perceived universally. For instance, smell of strawberry or balsamically fruit do not convey the singular olfactory meaning thus failing the precision standards. The problem becomes evident when seen in light of Rule 23(1)(b) of Trademark Rules, 2017 which mandates that the application must clearly depict the graphical representation of the trademark. Further rule 26(1) states that the trademark shall contain clear and legible representation.²³ The Draft manual of trademark under section 3 also emphasizes these requirements by defining Trademark as including any mark as long as the mark is represented graphically and capable of distinguishing the goods or services of one person from that of others.

Furthermore, section B chapter 4 of a Draft Manual of Trademarks defines the trademark as including any mark as long as the mark is represented graphically and capable of distinguishing

²¹Trade Marks Rules, 2017, §2(1)(k) (India).

²²Atish Chakraborty, Graphical Representation and Indian Trademark Law (June 22, 2021), SSRN Working Paper, <https://ssrn.com/abstract=3892757>.

²³Trade Marks Rules R. 23(1)(b), 26

the goods or services of one person from that of the others.²⁴The Delhi High Court in the case of **Cadbury India Ltd & Ors v Neeraj Food products** stated in paragraph 73 that “The spirit, intendment and purpose of the Trademark legislation is to protection of the trader and consumer against dishonest adoption of another's well known trademark with the intention of capitalizing on the attached reputation and goodwill or dishonest adoption of a trademark which is deceptively similar to the well-known trademark”²⁵ This view by the court raises the challenges of extending protection to non-conventional trademarks, especially smell marks as such marks cannot be objectively and precisely represented, making it difficult to prevent dishonest adoption and to ensure clarity and distinctiveness required for registration. Thus the Olfactory trademarks cannot currently be registered under Indian Trademark law as it failed to meet the criteria of graphical representation.

3. FUNCTIONALITY

Functionality doctrine which restricts the protection of product's characteristics that have a useful function. It becomes challenging to prove that particular smell is not a functional component. This doctrine aims to prohibit monopolization of product. If a part of product is useful for how the product works it cannot be protected as trademark. Allowing one company to trademark a functional smell would prevent competitors from using their own products. For instance, if medicine smells like coco flavor to make it taste better such smell is functional and it cannot be trademark. Smell can be trademark only when such fragrance is used for identifying the brand's product. In UK smell of **Bitter beer** was registered under scent marks because it had no functional use and helps for consumers to identify the brand²⁶. UK registered their smell marks for dart flights. In **re Pohl-Boskamp case** the pharmaceutical company sought registration for the peppermint flavor and scent of nitroglycerin spray prescribed for heart ailments. The application got rejected since it established functionality, which barred from trademark protection. Flavor was more beneficial in treating chest problems. Since this flavor has functional component, it is rejected from registration.²⁷

²⁴Draft Manual of Trademarks: Practice and Procedure § B, ch.4(2015)

²⁵Cadbury Indus.Ltd. v. Neeraj Food Prods., 2007 SCC OnLine Del 841, 35 P.T.C.95 (Del.H.C.2007).

²⁶Darts and Bitter Beer, Jazz Legal, <https://jazz.legal/en/darts-and-bitter-beer/>

²⁷re Pohl-Boskamp GmbH & Co., 106 U.S.P.Q.2d 1042 (T.T.A.B.2013)

XI. Comparative analysis of registering scent marks

1. EU

The European Union (EU) is home to Global perfume hubs like France (Grasse) and Italy, where the fragrances form a significant part of economy. The perfume making holds a high cultural heritage value in EU, where it is closely tied to Tradition, identity and lifestyle. Scent has a remarkable power to unlock memory from past, with many European regions promoting local scents like pine forest, lavender, orange blossoms as part of cultural branding. Despite holding a significant value the scents lack legal recognition under European law. Prior to the Sieckmann case, the trademark protection for the olfactory mark “the smell of fresh-cut grass” applied on the tennis ball was granted to **Venootschap onder Firma Senta Aromatic Marketing**.²⁸ The reasoning was that since the Community Trademark regulation (CMTR) has not expressly excluded the olfactory marks from protection, the essential requirement that it shall be graphically represented and the rationale behind the requirement is to enable the third party to ascertain the scope of the mark and readily understand what is being claimed, it was argued that the smell of freshly cut grass satisfies the condition, as for many people this scent or fragrance would give a nostalgic feeling of playing fields, spring, or summer, and its distinctive nature gives a clear and unambiguous idea the people of what the mark is when used in connection with the tennis ball. The board held that olfactory description provided for tennis ball fulfilled the requirement of graphical representation mentioned under Article 4 of Community Trademark Legislation (CTMR). The 2003, **Ralph Sieckmann v Deutsches Patent-und Markenamt** case, before the European court of justice dealt with registering a scent called ‘methyl cinnamate’ with balsamically fruity note with a faint of cinnamon aroma. He provided chemical formula, written description and a sample too. The issue before the court was whether these submissions amount to a valid graphical representation, in addressing this, the court laid down seven criteria to be qualified for the graphical representation such as clear, precise, durable, easily accessible, intelligible, self-contained and objective and held that the chemical formula and written description and sample cannot meet these criteria as they are too technical and subjective in

²⁸Venootschap onder Firma Senta Aromatic Marketing’s Application, E.T.M.R. 429, OHIM BoAR 156/1998/2; EUTM 000428870.

nature. Therefore, the court rejected the application by setting a stringent criterion for the graphical representation. A significant change in EU trademark system was brought by way of Regulation (EU) 2017/1001 which lifted the previous requirement of graphical representation and states that for a sign may be represented in any appropriate form using generally available technology and not strictly by graphic means, in so far as the representation is clear, precise, self-contained, easily accessible, intelligible, durable, and objective.²⁹ Later in the case of **Eden SARL v. Office for Harmonization in the Internal Market** application for registration was made for an olfactory sign of ripped strawberries along with its graphical image. The court in this case rejected the application as the representation failed to meet the criteria laid down in Sieckmann case.³⁰ Thus, the Sieckmann ruling becomes the benchmark authority for establishing the strict standards for graphical representation of olfactory trademark in Europe.

2. US

Essentials for Registering smell marks in US

The candidate must demonstrate that scent is only useful for differentiating and recognizing an item. This means that fragrance producing product such smells are not eligible for registering scent marks

1. Functionality

United States of Patent and Trademark Office (USPTO) says that if feature is deemed functional if it is necessary for the product to be used or has an impact on its functionality then it cannot be trademarked. Smell can be registered only if it is used to identify product's brand.

2. Distinctiveness

To register a smell mark, submit the application to Principal register and should prove that smell is distinctive and is recognized by the customers as brand. Fails to prove the distinctiveness of the smell it can only be registered by supplementary register but not on principal register. Smell marks were first registered by United States of America, as opposed to European Union. The Trademark Review Commission of the United States Trademark Association confirmed after

²⁹Ralf Sieckmann v. Deutsches Patent- und Markenamt, C-273/00, E.C.R. I-11737, 12 (ECJ)

³⁰Eden SARL v. Office for Harmonization in the Internal Market, Case R132/2004-2 (OHIM BoA).

reviewing the Trademark Act of 1946 that “the terms’ symbol, or device should not be deleted or narrowed to preclude registration of things like a color, shape, smell, sound, or configuration which functions as a mark. US law that established the national trademark registration system is the Lanham Act 1946. **In Re Celia Clarke** Celia was selling yarn that has smell of plumeria blossoms for sewing thread and embroidery yarn. Celia applied to register the smell of yarn. USPTO initially denied the application, stating that consumers would consider the smell to be a ‘nice side effect’ not a trademark and smell should be accessible to all manufacturers. On appeal the trademark trial and appeal board (TTAB) reversed the denial and permitted registration. Since yarn does not naturally smell of flowers and smell had not affected upon the thread’s quality, use or price. The plumeria scent was not functional in nature. And proved that scent had established secondary meaning, when the customers identified yarn in market by its flower smell. A Mark that is merely descriptive or otherwise not inherently unique may be registered under sec 2(f) Lanham Act if the applicant can prove that such mark has become unique through substantial exclusive and consistent usage. In this case Clarke proved that even though smell is not inherent distinctive but the long-term usage of plumeria scent led the consumer recognition. In re Clarke one of the first cases in United states of America to register a smell mark under section 2(f) of Lanham Act.³¹

In **Play-Doh case**, Hasbro attempted to trademark unique smell of Play-doh’s which is characterized as a blend of salted wheat dough, sweet vanilla, cherry and slight musk. USTPO initially rejected it stating that toy compounds have added smell and buyer would view it as merely a feature rather than brand identifier. Then Hasbro provided more than 300 pieces of evidence, including advertisement, social media post, media articles and evidence of extensive use since 1955, demonstrating that people are familiar with Play – Doh signature scent. In 2018 the USTPO authorized the registration after concluding that the fragrance had gained secondary meaning.³²

³¹reClarke, 17 U.S.P.Q.2d 1238, 1239 (T.T.A.B. 1990).

³²Center for American Law, Case Analysis: Hasbro’s Play-Doh Scent (U.S. Trademark No. 5467089), (last visited Sept. 21, 2025), <https://uslaw.rs/case-analysis-hasbros-play-doh-scent-u-s-trademark-no-5467089/>.

United States has demonstrated a comparatively flexible approach in recognizing scent marks focused on non-functionality, distinctiveness and a reasonable standard of graphical representation not strict graphical requirements. European union through sieckmann case has demonstrated strict requirements which has led to non-successful registration of scent marks. India should focus on flexible US based approach for registering scent marks.

XII. Using technology to address the difficulties in smell registration

Two basic requirements for registering scent marks they are distinctiveness and graphical representation. It becomes major obstacle for registering the scent marks. Olfactory marks have frequently been rejected by traditional trademark regimes. To overcome these obstacles certain technological innovation such as electronic noses, scentography, Madeleine camera, neuroscientific techniques like EEG etc. The sensory assessment method test consumer's perception of products by engaging to their senses particularly their sense of smell.

- **Electronic nose (E-nose)**-Electronic nose is a sensing device that uses electronics to identify flavors or scent. A computer device called the scent dome uses oil cartridges to emit various scents. It allows users a smell experience from their computer by using digital codes to control which scents are released.³³
- **Digital Scent technology**- Adding smells to digital experiences such as website, video games is known as digital scent technology. Certain companies such as Feel Real, create unique virtual reality masks that release various fragrances to enhance the quality of virtual worlds.³⁴
- **Scentography**- It is a method to artificially create and save smells using chemicals and machines. Madeline camera can capture a smell and convert it into a kind of chemical formulae so that the exact smell can be recreated later or can be used as scent signature.

³³MarianaValenteFarraiaetal., The Electronic Nose Technology in Clinical Diagnosis: A Systematic Review, 4 Porto Biomed. J. e42 (2019), <https://doi.org/10.1097/j.pbj.0000000000000042>.

³⁴Donepudi Manasa Devi, Digital Scent Technology ,6 Int'l Res. J. Modernization Eng'g Tech.&Sci.2658 (July 2024), https://www.irjmet.com/uploadedfiles/paper/issue_7_july_2024/60397/final/fin_irjmet1721670492.pdf

These technological tools help to overcome the difficulty of graphical representation since it converts into chemical formulae.³⁵

- **Neuro scientific techniques**-Smells have an impact on brain activity particularly in the central nervous system. It made use of electro-encephalography (EEG) technique to measure brain waves. fMRI allows visualization of specific brain regions associated with memory and emotion that are activated by particular scent stimuli, including limbic system, olfactory cortex and amygdala. EEG and fMRI data are scientific tools that measure how the brain reacts to various stimuli, including smells.³⁶

XIII. Recommendations

Based on the findings of this study the following recommendations are proposed:

1. Liberalizing the graphical representation requirement:

The requirement of graphical representation is mentioned under section 2(1) (zb) of the Trademarks act, 1999 which stipulates that, “**only marks capable of being represented graphically can be registered as trademarks in India**”. It is an indispensable requirement to be complied with but is extremely difficult for unconventional marks especially, smell to be represented graphically. This serves as a significant obstacle for registering scent mark under Indian law. After the sieckmann case, EU to overcome this obstacle passed EU Directive **2015/2436** and (EU) Regulation 2017/1001 whereby lifted the requirement of graphical representation and allowed the representation through any “generally available technology provided, it is clear, precise, self-contained, easily accessible, intelligible, durable, and objective manner enabling the authority and the consumers to identify and distinguish the goods and services. Similarly in US through Lanham act removed the obligation to submit drawing when the mark consists solely of a

³⁵Scentography Camera Is a Fragrance Revolution, Just Luxe (last visited Sept. 21, 2025), https://www.justluxe.com/community/scentography-camera-is-a-fragrance-revolution_a_1944921.php

³⁶David March, Scientists Decode How the Brain Senses Smell, NYU Langone Health (June 18, 2025), <https://nyulangone.org/news/scientists-decode-how-brain-senses-smell>

sound, aroma, or other wholly non-visual substance, and thereby ease the registration process. It is therefore suggested that like the USA and EU, India should also amend its law to remove the requirement of graphical representation for registration of trademarks.

2. Written description:

A Written description of scent is suggested as an effective means of representation in so far as it accurately and distinctively defines the mark and assists distinction of goods and services by General public and authorities. However, the applicant to be careful with regard to the different controlling factors like temperature, pressure, humidity while providing a comprehensive description. The applicant should refrain from using a subjective word. When description is insufficient and ambiguous a sample shall be submitted along with its description explaining detailed procedure of obtaining the particular smell.

3. **Digitalization Technology:** It is recommended that India can adopt technologies like E-nose, digital scent technology, scentography, electroencephalography (EEG) technique, FMRI and other specialized technical tools to identify and categorize scents, aiding evidence in infringing cases. Although promising, these technologies are still developing and should be applied cautiously.

XVI Conclusion:

India should change its trademark laws to make it easier for non-traditional marks to be registered. Businesses and consumers will both gain from allowing registration. By building a brand in the marketplace will assist businesses in safeguarding their unusual intangible assets, such as distinct flavor and aroma of their goods. In so far as consumers are concerned, it prevents them from buying forfeited goods and helps easy identification of brands.