

Non-traditional Trademarks in the Context of
Modern Marketing Management: Impact of Scent
Technology Development and Other Considerations
on Registrability of Scent Trademarks in the
European Union

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Abstract:

Marketers are increasingly appealing to consumer's sense of smell through sensory and experience marketing activities in order to improve brand recognition and recollection, and to create unique consumption and purchasing experiences. This is no coincidence as sense of smell is one of the strongest forms of human recollection, and scent stimulus has the capability of evoking emotions and influencing consumer behavior unconsciously due to our physiology.

Scents are typically utilized as a part of a product to increase the appeal to consumers, applied to the atmospherics to create a pleasant environment or as a distinctive sign alone or in combination with other signs to differentiate and identify the brand. According to marketing research, consumers can reliably recall brands based on scents attached to the product, while this ability to connect the brand and product is not as strong when a scent is dispersed to the surroundings. Consequently, scents are capable of performing the core function of a trademark of indicating the origin of the goods and distinguishing them from the competing alternatives.

In order to be registered as a trademark in the European Union, protectable subject matter should be inherently distinctive or acquired this status through use, and the sign should be represented in a clear, precise, self-contained, durable, intelligible and objective manner. While scent marks, like other non-traditional signs, are not explicitly excluded from the definition of a trademark in the international treaties and agreements, and the legislation in the European Union embraces a wide and open definition of a trademark after the removal of graphical representation requirement in 2017, it has proven challenging for smell marks to meet the Sieckmann criteria on representation. As shown, scent technologies are expected to offer solutions to identify, specify, store, and reproduce scents in the future that would enable overcoming the representation challenges in scent mark registration.

Evaluation of selective theories on scents in marketing management and the prevailing trademark law in the European Union suggests two-folded changes in order to prepare for the emerge of scent marks in the coming decades: First, evidence on demonstrated capability of the proposed sign to perform in the function of a trademark, and particularly on the formed connection between the protectable subject matter and the products recognized by the target market should be required in the registration phase. Secondly, assessment of the impact of registering the proposed sign on market dynamic, competition and consumers should be included, and absolute grounds of refusal utilized to decline registration of signs with negative competitive impacts. The recommendations suggest European legislators to move beyond the criteria of distinctiveness and representation and focus on ensuring that signs with intent and demonstrated capability to act as a trademark are registered.

Legislation covered: Trademark Directive 2015/2436, Trademark Regulation 2015/2424, European Trademark Regulation 2017/1001

Keywords: non-traditional trademark, scent mark, scent technologies, distinctiveness, representation

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1 INTRODUCTION: SCENTS IN MODERN MARKETING AND AS TRADEMARKS

1.1 Background to the research topic

In today's highly competitive consumer market, brand owners strive to create brand experiences that exploit all five human senses and leave a long-lasting mark to consumers' memory. By using unconventional brand elements, and going beyond the traditional components, brand builders aim to come up with attractive identities for their brands, which stand out from the competing alternatives, influence consumers' purchasing decisions favorably and create positive user experiences. According to the American Marketing Association, a brand is an intangible asset and a marketing concept that is used to 'create distinctive images and associations in the minds of stakeholders, thereby generating economic benefits and value.'¹ Brand is a concept that enables consumers to differentiate between alternative products and services in a certain market and category.² It is a wide term that covers the image of a company, product, service, even individual, and can be understood as how a potential customer would perceive a brand at the time of encountering it.³

As brands are often highly valuable assets for a company, businesses seek to protect these intangible assets through trademark registration that offers protection for an unlimited period of time given that renewal procedures are followed and completed. Trademark is a legal concept and instrument that aims to protect individualized products or services in the commercial circulation in order to enable consumers to identify the sources of the product or service, distinguish competing alternatives in the market and safeguard investments made by the brand owners into the development of a trademark.⁴ According to Merriam-Wester dictionary, a trademark is understood as 'a device (such as a word) pointing distinctly to the origin or ownership of merchandise to which it is applied and

¹ <https://www.ama.org/the-definition-of-marketing-what-is-marketing/>

² Degermen Erekol Anil, AK Merve, Sensory marketing, *Journal of Administrative Sciences and Policy Studies*, June 2015, Vol 3, No 1, p1-26. American Research Institute for Policy Development, <http://dx.doi.org/10.15640/jasps.v3n1a1>

³ Wolangiewicz, How, it at all, should the law of trademarks adapt to the rise of sensory marketing?, *Wroclaw Review of Law, Administration & Economics*, 7(2), p40-57, December 2018, https://www.researchgate.net/publication/329343664_How_if_at_All_should_the_Law_of_Trademarks_Adapt_to_the_Rise_of_Sensory_Marketing

⁴ Odintsov Stanislav v, Trubina Marina V, Mansour Mohammad, Comparative legal analysis of protectability of olfactory trademarks, *Amazonia Investiga*, Volume 9 – Issue 27 / March 2020, p.130, https://www.researchgate.net/publication/340122068_Comparative_legal_analysis_of_protectability_of_olfactory_trademarks

legally reserved to the exclusive use of the owner as a marker or a seller'.⁵ Trademark typically consists of a sign, such as a word, logo, or figure, or a combination of these that has developed a meaning beyond its original character, has a capability to connect the sign with the goods or services in question, and serves as a channel of conveying messages between the brand and consumers.

The American Marketing Association defines marketing as 'an activity, set of institutions and processes aimed at creating, communicating, delivering, and enhancing offerings that have value for customers, clients, partners and society at large'.⁶ During the last decades, adoption of new marketing strategies and methodologies in the highly competitive market, and particularly, the emerge of experience and sensory marketing, has increased the usage of non-traditional elements, such as shape, texture, scents and taste in the brand building beyond the conventionally used word or figure signs. Based on World Intellectual Property Office (WIPO) statistics, the number of trademark applications has been increasing at a rate of 15% per year that is predicted to quickly exhaust the amount of non-trademarked and eligible signs still available for registration in the market.⁷ The scarcity of available signs together with realization of the power of sense-based elements in marketing is creating an increasing interest towards using non-traditional signs, such as scents, touch or tastes, as a new source and possible pool of distinctive signs that may be registered as trademarks. As a result of this evolving trend, trademark law has been under pressure to respond to the changes and provide protection for innovative sensory marks that utilize and appeal to the human sensory organs such as sight, smell, and touch.⁸ Consequently, adjustments have been made to the prevailing treaties and legislations on the international, regional, and national level to build the readiness for non-traditional trademark registration in different jurisdictions.

In the European Union, the requirement of graphical representation was removed in the Trademark Reform of 2017 that created in theory a possibility to register non-traditional elements as trademarks and introduced an open and wide definition of signs that could qualify for trademark protection in the region. Despite of their significance in the course of trade and regardless of the fore-mentioned changes in the legislation, certain types of

⁵ <https://www.merriam-webster.com/dictionary/trademark>

⁶ <https://www.ama.org/the-definition-of-marketing-what-is-marketing/>

⁷ World Intellectual Property Office (WIPO), World Intellectual Property Indicators: Filings for Patents, Trademarks, Industrial Designs Reach Record Heights in 2018, https://www.wipo.int/pressroom/en/articles/2019/article_0012.html

⁸ Kapoor Sanya, Gupta Riya, The five senses and non-traditional trademarks, Amity Law School, published 2018, <https://supremoamicus.org/wp-content/uploads/2018/10/V8A26.pdf>

non-traditional trademarks, such as scents, still fail the requirements set for trademark registration, and consequently, lack effective legal protection in reality in several jurisdictions including the European Union. This may, however, change as recent advancements in digital scent technology is about to provide solutions to identify, store and reproduce scents, and enable overcoming the recognized challenge that scents have in fulfilling pre-condition of clear and precise representation set for trademark registration in the European Union. Even if legislation has been adjusted to accomodate the emerge of scent marks and further steps can be taken to build the readiness of the legal system to utilize the fore-mentioned technological solutions, it must be carefully assessed whether the current legal framework is adequate to meet the non-traditional signs, such as smells, that differ in their functioning logic from the conventional marks. Further the question should be asked whether there are other considerations that would argue for limiting or still not allowing registration of scents as trademarks in the future. Such other considerations may be amongst others prevention of a scent monopoly, avoiding negative impacts on innovation and quality, or unconscious and manipulative impact of scents on consumer behavior.

1.2 Research topic, questions, and limitations

The purpose of this thesis is to assess and discuss the registrability of scent marks in the European Union in the context of modern marketing management and emerging technological advancements. The thesis will a) describe the role of scents in modern marketing management and contrast it with the trademark registration requirements and protection currently available for scents, b) examine whether and in which manner advancements in digital scent technologies will influence, and possibly enable scent marks to fulfill the representation requirements set for trademark registration in the European Union and c) discuss possible other considerations that may argue for or against registration and protection of scent marks beyond the aspects that are satisfied through technological solutions. The scope of the thesis is limited to examining registration of scent marks applied for products, excluding services. The focus will be put on the context of registration and protection of a scent mark before or after possible registration will not be covered, meaning that for example enforceability of the exclusive right or infringement cases will be excluded, as well as protection of well-known trademarks.

Consequently, the following research questions will be assessed and answered:

- What is the role and impact of scents in modern marketing management in comparison to the criteria of trademark registration in the European Union?
- How and to what extent are current and future scent technologies able to satisfy requirements set for trademark registration in the European Union?
- What are the remaining open issues or considerations that possibly limit or should limit registration of scents as trademarks?

The scope of the thesis is set on trademark law in the European Union, excluding the UK that has made their decision to exit the Union. While trademark protection can be assessed on international, regional, or national level, in this thesis the focus is placed on the European Union level legislation, and references to the national and specific other jurisdictions will be made only selectively, and where comparison or examples are seen to add value to the discussion. Out of the various non-traditional trademark types, scent marks will be covered, and comparison will be drawn on specific cases to taste and color marks due to their similar nature to olfactory signs, while other traditional and unconventional elements will be left for the other researchers to explore. Other intellectual properties outside trademarks or possible forms of protection available for scents, such as copyrights, patents, or design rights, will be referred to, but not included into the deeper discussion.

1.3 Research methodology

The research behind this thesis applies legal dogmatic research methodology a) by assessing the current legislation (*Lex Lata*) governing trademark registration, and consequently scent marks, in the European Union and b) by proposing what the law should be (*Lex Ferenda*) based on an evaluation that contrasts marketing theories and research on scents in brand building with the currently prevailing trademark law and considers possible impacts of technological development on scent mark registration.⁹ In addition to legal dogmatic research methodology, interdisciplinary research method will be applied to reason what the law should be by incorporating perspectives and theories from marketing management, by including science-based argumentation on scent technologies, and by presenting evaluations based on business, economic and market

⁹ Smith Jan M, What is legal doctrine? On the aims and methods of legal-dogmatic research, Maastricht University, September 2015, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2644088

considerations. Furthermore, analysis of landmark cases in Europe related to scent mark registration will be presented to gain insights on how technological advancement would have impacted those decisions had the solutions been available at the time of ruling on the cases. Argumentation from law cases involving color and taste marks will be included, when seen relevant, to draw conclusions and make proposals based on the similar nature of these nontraditional elements to smells. This master thesis is futuristic and predictive in nature; it aims to discuss current and possible future challenges facing legislators, courts, trademark holders, competitors, and technology companies in the coming years. The ambition is to assess considerations beyond technically meeting the requirements set for trademark registration and propose solutions on how the law should be amended given the increasing popularity of experience and sensory marketing and advancements in the scent technology as of now and in the future.

1.4 Structure of the Master Thesis

The first part of the thesis focuses on outlining the background, research question and methodology. The second chapter is dedicated on describing the role and impact of scents as a human sense, in the modern marketing management, while the third part will explore and outline the legal foundation for trademark protection in the European Union, and when applicable, global, and national perspective will be included. The fourth chapter will focus on examining the recent technological solutions developed to identify, store, and reproduce scents, and evaluate their ability to fulfil the preconditions set for trademark registration in the European Union. In this section, the direction of future technological solutions will be presented and predicted to the best of knowledge and ability. In the fifth section, the relevant landmark cases concerning scent marks will be evaluated against the recent and predicted scent technology development with an attempt to draw conclusions on the feasibility of registering scent marks in the future, possible, similar cases. Relevant argumentation from cases involving color or taste will be presented throughout the thesis in case seen beneficial and contributing to the discussion. In the sixth chapter a broader view is applied to compare the findings from marketing theories with the current trademark law in the European Union to propose possible amendments to the legal framework. This discussion will cover other possible considerations that may support or argue against scent mark registrations in the region. We seek to answer the question should we register any sign that fulfills technical requirements set on trademark registration or are there other considerations that should impact the possibilities to register a distinctive sign as a trademark. The final chapter summarizes the discussion in the thesis and presents the conclusions.

2 MARKETING THEORY: SCENT ELEMENTS IN BRAND BUILDING

2.1 Smell as a human sense

Humans have five senses, those being sight, hearing, touch, taste, and smell. We – like other mammals – constantly observe the surrounding environment with our sense of smell to detect chemicals that would lead us to food, alert of danger, help in social interactions and help us to identify partners for reproduction.¹⁰ We have learnt to know both in our daily life and cultural context that certain types of scents calm us down, release stress, give us energy, while specific smells generate negative feelings, fear or even disgust. The sense of smell combined with the ability to recall scents and associated meanings has helped and is still helping the human species to survive and navigate in the environment surrounding us.

Human physiologic and psychologic research confirms that ‘among human senses, the most significant impact on human memory is exerted through chemical-biological smells’.¹¹ While humans forget the verbal information relatively quickly, our ability to recognize scents accurately remains relatively stable over time.¹² Humans can recall 10 000 smells on average, and can remember 65% of scents after a year, while in case of visual objects the recollection rate is 50% after three months.¹³ Given this phenomenon and that humans can observe and distinguish on average one trillion different scents¹⁴, olfactory memory is one of the strongest, most reliable and impactful forms of human recollection. Scents both engrave memories to our minds, but they also evoke them and stimulate emotions and trigger actions.

¹⁰ Breer H, Fleischer J, Strotmann J, The sense of smell: multiple olfactory subsystems, Cellular and Molecular Life Sciences, July 2006, p. 1465,

https://www.researchgate.net/publication/233488433_Signaling_in_the_Chemosensory_Systems

¹¹ Odintsov Stanislav v, Trubina Marina V, Mansour Mohammad, Comparative legal analysis of protectability of olfactory trademarks, Amazonia Investiga, Volume 9 – Issue 27 / March 2020, p.130

¹² Herz Rachel S, Engen Trygg, Odor memory: Review and analysis, Psychonomic Bulletin & Review, 1996, 3 (3), p 300-313,

https://www.researchgate.net/publication/258430509_Odor_memory_Review_and_analysis

¹³ Degermen Erenkol Anil, Merve AK, Sensory marketing, Journal of Administrative Sciences and Policy Studies, June 2015, Vol 3, No 1, p 1-26, American Research Institute for Policy Development, <http://dx.doi.org/10.15640/jasps.v3n1a1>

¹⁴ Williams Sarah, ‘Human Nose Can Detect A Trillion Smells’, Science Magazine, 20.3.2014, <http://news.sciencemag.org/biology/2014/03/human-nose-can-detect-trillion-smells>

The sense of smell is the ability of a mammal ‘to use the nose to notice or discover the presence of an odorous substance in the air...that has a smell or odour.’¹⁵ Smell is a physiological process, in which small, volatile odorant molecules enter human nose, where they meet sensory neurons and olfactory receptors that send electric signals to the brain.¹⁶ In the human limbic system, a scent element that has met the sensors directly influences amygdala, the sensory centre of human brain, which controls feelings and memories, and consequently, conditions us to remember a product or circumstance linked to the scent and the associated emotions. This direct connection from the scent sensors to amygdala means that scents affect consumers without them being conscious about it, but as well this happens without distraction or interference from other stimuli around.¹⁷ Nobel Prize winners of 2004, Linda B Buck and Richard Axel discovered in their research that mammals possess a family of genes and consequently receptors, which each are able recognize multiple scents, and in different combinations that explains the high numbers of scents humans are able to detect.¹⁸ Despite these advancements in the research, it is still not fully known, although theories exist, how the human sense of smell functions, particularly the question of how odorant triggers electric signal from the receptors is important to answer to be able to differentiate scents reliably based on the chemical compositions that trigger scent experiences. Answering this question would enable categorising scents in a similar fashion as colours can be determined and categorized based on wavelengths of light in the Pantone or RAL - system.¹⁹

¹⁵ Gosain Devashish, Sajwan Mohit, ‘Aroma tells a Thousand Pictures: Digital Scent Technology a New Chapter in IT Industry’, International Journal of Current Engineering and Technology, Vol 4, No. 4, August 2014,

https://www.researchgate.net/publication/281285713_Aroma_Tells_a_Thousand_Pictures_Digital_Scent_Technology_a_New_Chapter_in_IT_Industry

¹⁶ Brookes Jennifer C, Science is perception: what can our sense of smell tell us about ourselves and the world around us?, The London Centre for Nanotechnology, University College London, 2010, p. 3492, <https://royalsocietypublishing.org/doi/full/10.1098/rsta.2010.0117>

¹⁷ Wolangiewicz, How, it at all, should the law of trademarks adapt to the rise of sensory marketing?, Wroclaw Review of Law, Administration & Economics, 7(2), p40-57, December 2018, https://www.researchgate.net/publication/329343664_How_if_at_All_should_the_Law_of_Trademarks_Adapt_to_the_Rise_of_Sensory_Marketing

¹⁸ Buck Linda & Axel Richard, The Nobel Prize in Physiology and Medicine 2004, ‘Odorant receptors and the organisation of the olfactory system’, <https://www.nobelprize.org/prizes/medicine/2004/press-release/>

¹⁹ Brookes Jennifer C, Science is perception: what can our sense of smell tell us about ourselves and the world around us?, The London Centre for Nanotechnology, University College London, 2010, p.5300, <https://royalsocietypublishing.org/doi/full/10.1098/rsta.2010.0117>

We know based on research that sense of smell impacts our emotions more than other senses due to our fore-mentioned physiological structure²⁰, and almost 75% of the feelings we experience are initiated through the sense of smell.²¹ As stated earlier, emotions triggered by scents are a result of a cognitive, but unconscious process, they are created automatically and mostly out of our control.²² This is where the sense of smell differs from the other four senses that require a conscious evaluation of the sign and assessment of its meaning prior we conclude and trigger a response.²³ When we face a familiar scent, our brains compare it to our previous experiences, and it is quite often so that we are not able to describe or name the place or circumstances, where we encountered the scent for the first time, but we still get a vivid picture to our minds, experience emotions, and judge the smell as familiar and known, or unpleasant and dangerous. This phenomenon where memories are rapidly and subconsciously recalled and stimulated based on a scent is so-called Proustian memory.²⁴ We make the connections between the scent and item unconsciously, and emotions are evoked without us being able to control it.

Even if our physiological process of detecting smells is the same, humans have individual experiences, expectations, motives, and memories related to different smells, and do not share the same recollection, give standard meanings, get comparable feelings, or form similar perceptions of the scents we encounter. Scents represent for us individual and unique experiences that we have learnt ourselves, developed based on our positive or negative experiences or our society or culture has taught us the meanings. Interestingly enough, scents are closely connected with tastes. As a sensory organ observing chemicals,

²⁰ Rathee Rupa, Rajain Pallavi, Sensory marketing – investigating the use of five senses, *International Journal of Research in Finance and Marketing (IJRFM)*, Vol 7, Issue 5, May 2017, p 124-133, https://www.researchgate.net/publication/325682168_Sensory_Marketing-Investigating_the_Use_of_Five_Senses

²¹ Degermen Erenkol Anil, Merve AK, Sensory marketing, *Journal of Administrative Sciences and Policy Studies*, June 2015, Vol 3, No 1, p 1-26, American Research Institute for Policy Development, <http://dx.doi.org/10.15640/jasps.v3n1a1>

²² Same Siiri, Larimo Jorma, Marketing theory: Experience marketing and experiential marketing, 7th International Scientific Conference, Business and Management 2012, 10-11.5.2012, Lithuania, https://www.researchgate.net/publication/268016525_Marketing_Theory_Experience_Marketing_and_Experiential_Marketing

²³ Kumar Abhijeet, Protecting Smell Marks: Breaking Conventionality, *Journal of Intellectual Property Rights*, Vol 21, p 129-139, May 2016, <http://nopr.niscair.res.in/bitstream/123456789/34726/1/JIPR%2021%283%29%20129-139.pdf>

²⁴ Wolangiewicz, How, it at all, should the law of trademarks adapt to the rise of sensory marketing?, *Wroclaw Review of Law, Administration & Economics*, 7(2), p40-57, December 2018, https://www.researchgate.net/publication/329343664_How_if_at_All_should_the_Law_of_Trademarks_Adapt_to_the_Rise_of_Sensory_Marketing

human sense of smell detects airborne chemicals through nose sensors, and closely connects these with compounds transferred through licking and tongue.²⁵ According to research, scents build 80% of the taste experience, while sensors on the human tongue that signal taste flavours create only 20% of the observed taste experience.²⁶

2.2 Scents as an element in modern brand management

As consumers, we attempt to experience the products to our best ability through our senses of sight, touch, hear, smell and taste prior to making a purchase decision. By doing so, our ambition is to confirm that the purchased good fulfills our needs and expectations and to minimize the risk of a possible wrong purchase. During the last decades, marketers have gradually understood the importance of appealing to the full palette of senses – not only sense of sight – and incorporating non-verbal elements to brand building activities. The impression of quality and image that consumers detect and perceive through different senses as a combination plays an important role in making purchasing decision, and later impacts user experience and customer satisfaction. Particularly, brand builders have come to appreciate the significant power of appealing to non-visual senses in the marketing activities, they can be seen as an unexplored channel to influence consumer behavior or an unknown barrier to be overcome to connect with a potential client.

Increased competition in the globalized consumer markets is forcing companies to seek new ways to stand out from the competing alternatives, reach consumers to convey messages and promote their products effectively. Revolution in digital communication and rise and popularity of social media have imposed new realities on brand builders and brought a paradigm shift into branding practices.²⁷ This phenomenon has encouraged brand builders to apply innovative techniques, such as sensory or experience marketing, that appeal to one or a combination of human senses. According to Degermen and Merve, the main reasons for practising sensory or experience marketing are changing consumer behaviour that indicates that consumers are increasingly searching for entertainment and unique experiences, the observed decline in general brand loyalty amongst

²⁵ Breer H, Fleischer J, Strotmann J, The sense of smell: multiple olfactory subsystems, Cellular and Molecular Life Sciences, July 2006, p. 1473,
https://www.researchgate.net/publication/233488433_Signaling_in_the_Chemosensory_Systems

²⁶ Friedman Danny, EU opened door for sound marks, will scents follow?, Journal of Intellectual Property Law and Practice, Oxford University Press, December 2015, p931-939,
<https://www.researchgate.net/publication/284564005>

²⁷ Lukose Lisa P, Non-Traditional Trademarks: a Critique, Journal of the Indian Law Institute, Vol 57, No2 (April-June 2015), p.197-215, <https://www.jstor.org/stable/44782501>

consumers that can be tackled through multi-sensory activities and the positive impact sense-based marketing has on consumers' perception of the brand in question.²⁸ Advancement in neuroscience has offered solutions for marketers by explaining how our brain processes signals we get through our senses, and how the observations turn into emotions, perceptions, and behaviors.²⁹ The next section discusses the theory and concept of experience and sensory marketing in more detail.

2.2.1 Experience marketing

Experience marketing is a marketing method that aims to connect consumer experience and entertainment with a product in order to increase the level of communication between the brand and the consumers, and to improve users' perception of service or product quality, customer satisfaction and loyalty.³⁰ According to Tynan and McKechnie, experience marketing 'can deliver sensory, emotional, cognitive, behavioral and relational value to the consumers on top of which social and information based value can be added'.³¹ The approach sees consumers not only as rational decision makers concerned with the functional features or benefits of a product, but as well as emotional human beings looking for pleasurable experiences, which are created through feelings triggered by senses based on the stimuli from the surrounding environment.³² Walt Disney Corporation³³ is a well-known entertainment company, which has built its business concept on offering magic, imaginative and unforgettable experiences for their guests. Disney Parks are creating stimuli for all senses from colors and sounds to taste, texture and scents in order to offer a comprehensive and deeply impacting customer experience, and Disney firms and animations are applying similar approach to take the audience into another universe and reality.

²⁸ Degermen Erecol Anil, AK Merve, Sensory marketing, Journal of Administrative Sciences and Policy Studies, June 2015, Vol 3, No 1, p1-26. American Research Institute for Policy Development, <http://dx.doi.org/10.15640/jasps.v3n1a1>

²⁹ Manzano Roberto, Serra Teresa, Davilan Diana, Sensory Marketing: Straight to the Emotions, 6.5.2019, <https://www.ie.edu/insights/articles/sensory-marketing-straight-to-the-emotions/>

³⁰ Ara Zena Puti, Hadisumarto Dewanto, The Study of Relationship among Experiential Marketing, Service Quality, Customer Satisfaction and Customer Loyalty, Asean Marketing Journal June 2012, Vol IV, No1, <http://journal.ui.ac.id/index.php/amj/article/view/2030>

³¹ Tynan Caroline, McKechnie Sally, Experience marketing: a review and reassessment, Journal of Marketing Management 25 (5), p 501-517, July 2009, https://www.researchgate.net/publication/247495137_Experience_Marketing_A_Review_and_Reassessment

³² Schmitt Bernd, Experiential Marketing, Journal of Marketing Management, Volume 15, 1999 – Issue 1-3, p 53-67, <https://doi.org/10.1362/026725799784870496>

³³ <https://thewaltdisneycompany.com/about/#our-businesses>

Experience marketing is largely built on the theory of experience economy of Pine and Gilmore, who argue that ‘when products and services become commoditized, the customer experiences companies create matter the most.’³⁴ According to them, as we progress further on the economic offering value chain, the first level is formed by commodities that are fungible, nondifferentiated and basic, second and third level by tangible goods and intangible services that offer operational benefits and functionalities for the consumers, the fourth and newest level in this economic offering ladder is composed of experiences that are memorable, emotional and durable, and enable brands to stand out and differentiate themselves from the competition. In contrast to marketing activities that focus on external, concrete and visual attributes of the offering, experiences are highly intimate and personal, and they exist purely ‘in the minds of an individual, who has been engaged on an emotional, physical, intellectual, or spiritual level’.³⁵ According to a study conducted on Strawberry Café in Indonesia,³⁶ a restaurant operating in a highly competitive food and beverage business, application of experience marketing enhanced their customer loyalty. The company offered game playing experiences in the restaurants that became the key element in improving customer loyalty instead of service quality that was originally expected to be the reason behind higher customer loyalty. The service quality was found to influence positively customer satisfaction, but not customer loyalty. This research result is one example of scientifically confirming the power, deep and durable impact of experience marketing on consumer behavior and perception.

The concept of experience is multi-layered and complex as a phenomenon, and definition of experience from marketing perspective remains largely disputed and unsettled amongst the scholars. A common view seems to be, however, that experience is ‘an interaction and activity between a company, brand, product and customer, who perceives

³⁴ Pine Joseph B. II, Gilmore James H, Welcome to the experience economy, Harvard Business Review, July-August 1998, p 97
https://is.muni.cz/el/econ/jaro2020/MKR_PRCR/98252981/Pine_Gilmore_Welcome_to_the_Experience_Economy.pdf

³⁵ Pine Joseph B. II, Gilmore James H, Welcome to the experience economy, Harvard Business Review, July-August 1998, p 98-99
https://is.muni.cz/el/econ/jaro2020/MKR_PRCR/98252981/Pine_Gilmore_Welcome_to_the_Experience_Economy.pdf

³⁶ Ara Zena Puti, Hadisumarto Dewanto, The Study of Relationship among Experiential Marketing, Service Quality, Customer Satisfaction and Customer Loyalty, Asean Marketing Journal June 2012, Vol IV, No1, <http://journal.ui.ac.id/index.php/amj/article/view/2030>

and experiences this event'.³⁷ Based on Pine and Gilmore's theory of experience economy, 'an experience takes place when a company uses services as the stage, goods as props to engage individual customers in a way that creates a memorable event'.³⁸ An alternative way to understand experience is to see it as a state, and a result of the above described process, where feelings, knowledge or behavior have been impacted after an activity of doing, sensing or feeling.³⁹ Combining both previously mentioned definitions, an experience is both a process and an end result, meaning that the term 'is used variously to convey the process itself, participation in the activity' and 'the affect or way in which an object, thought or emotion is felt through senses or the mind'.⁴⁰

Customer experiences created by experience marketing techniques vary in the level of participation required by the experienter, and in the depth and width of connection and extent in which such elements as colors, sounds, scents or combination of these are used to connect and engage the consumers with the brand. According to a theory presented by Berndt Schmitt, who is one of the pioneers in the field, experiential marketing can be executed by using five different types of experiences or 'strategic experiential modules' (SME) that are based on experiences created through senses, feelings, thinking, physical activity, lifestyle, or relations to other persons.⁴¹ By composing an experience based on the above elements, a brand owner aims to create a strong and memorable experience that appeals to consumer's senses, forms a strong bond that influences consumer's emotions and behavior permanently, and increases customer satisfaction and loyalty in a positive manner.

³⁷ Same Siiri, Larimo Jorma, Marketing theory: Experience marketing and experiential marketing, 7t International Scientific Conference, Business and Management 2012, 10-11.5.2012, Lithuania, p 485, https://www.researchgate.net/publication/268016525_Marketing_Theory_Experience_Marketing_and_Experiential_Marketing

³⁸ Pine Joseph B. II, Gilmore James H, Welcome to the experience economy, Harvard Business Review, July-August 1998, p 98
https://is.muni.cz/el/econ/jaro2020/MKR_PRCR/98252981/Pine_Gilmore_Welcome_to_the_Experience_Economy.pdf

³⁹ Same Siiri, Larimo Jorma, Marketing theory: Experience marketing and experiential marketing, 7t International Scientific Conference, Business and Management 2012, 10-11.5.2012, Lithuania, p 481, https://www.researchgate.net/publication/268016525_Marketing_Theory_Experience_Marketing_and_Experiential_Marketing

⁴⁰ Tynan Caroline, McKenchie Sally, Experience marketing: a review and reassessment, Journal of Marketing Management 25 (5), p 501-517, July 2009, https://www.researchgate.net/publication/247495137_Experience_Marketing_A_Review_and_Reassessment

⁴¹ Schmitt Bernd, Experiential Marketing, Journal of Marketing Management, Volume 15, 1999 – Issue 1-3, p 53-67, <https://doi.org/10.1362/026725799784870496>

2.2.2 Sensory marketing

While experience marketing as a more wider definition focuses on creating a memorable and long-lasting experiences that impacts purchasing decisions favourably and utilises senses as one element in this process, the objective of sensory marketing is to reach, communicate, and engage with a consumer through their five senses in order to impact their perceptions, judgements and behaviours.⁴² Sensory marketing is ‘a tool used to influence consumption habits of a consumer by having sensory and emotional influence on them’⁴³. It has been as well described by the scholars as ‘a cross-media promotional activity appealing to all five senses that focuses on human mind’⁴⁴. Sensory marketing can be, thus, seen to overlap partially or be a component in experience marketing.

The American Marketing Association defines sensory marketing as a marketing technique that seduces ‘consumers by using senses to influence their feelings and behaviour’.⁴⁵ This definition highlights the notion that sensory marketing is tapping on the unconscious section of the human mind and using the automatic reactions of our bodies to an external stimulation to trigger desired emotions, behaviours, and decisions. The concept of sensory marketing is controversial as it suggests that human beings may not be fully in control or responsible for their actions and decisions but can be seduced and even manipulated by using sensory marketing techniques. Turning this into a positive interpretation, we may argue that sensory marketing taps on and fulfils the emotional and psychological needs of a consumer that stem from their deeper desires that drive them to associate with brands that are similar to their own personalities, and that convey and represent values, images and experiences that are truly valuable and relevant for the consumer.⁴⁶

⁴² Degermen Erenkol Anil, Merve AK, Sensory marketing, *Journal of Administrative Sciences and Policy Studies*, June 2015, Vol 3, No 1, p 1-26, American Research Institute for Policy Development, <http://dx.doi.org/10.15640/jasps.v3n1a1>

⁴³ Degermen Erenkol Anil, Merve AK, Sensory marketing, *Journal of Administrative Sciences and Policy Studies*, June 2015, Vol 3, No 1, p 1-26, American Research Institute for Policy Development, <http://dx.doi.org/10.15640/jasps.v3n1a1>

⁴⁴ Wolangiewicz, How, it at all, should the law of trademarks adapt to the rise of sensory marketing?, *Wroclaw Review of Law, Administration & Economics*, 7(2), p40-57, December 2018, https://www.researchgate.net/publication/329343664_How_if_at_All_should_the_Law_of_Trademarks_Adapt_to_the_Rise_of_Sensory_Marketing

⁴⁵ Degermen Erenkol Anil, AK Merve, Sensory marketing, *Journal of Administrative Sciences and Policy Studies*, June 2015, Vol 3, No 1, p1-26. American Research Institute for Policy Development, <http://dx.doi.org/10.15640/jasps.v3n1a1>

⁴⁶ Degermen Erenkol Anil, AK Merve, Sensory marketing, *Journal of Administrative Sciences and Policy Studies*, June 2015, Vol 3, No 1, p1-26. American Research Institute for Policy Development, <http://dx.doi.org/10.15640/jasps.v3n1a1>

Sensory marketing focuses on influencing every step of consumers' purchasing process by applying a so called 360-degree concept.⁴⁷ The methodology forms a connection and communication channel between the brand and consumers starting from activation of an idea and desire of having a need for a product, it facilitates and supports awareness creation, selection and decision making processes as well as ensures that consumer perceives the product, and associated brand positively during and after the use. At different stages of the purchasing process, different senses may be utilised and emphasised independently or as a combination to convey the desired message. Referring to the stimulus-organism-response paradigm presented by Mehrabian and Russell, a stimulus in the environment triggers an emotional reaction in consumer that leads to an emotional response of pleasure, arousal or dominance, and consequent behaviour of approach or avoidance.⁴⁸ According to Mehrabian and Russell, consumers react through cognitive, emotional, and behavioural responses to the external stimulus.⁴⁹ Cognitive response in this context refers to the perception created in consumers' minds, emotional response to the feelings and emotions triggered and behavioural response to the concrete actions taken by the consumer after encountering the stimulus used in the sensory marketing activity. Sensory marketing activities aim to impact the emotional responses in order to trigger the approach behaviour that translates into the fore-mentioned desire to explore a product in more detail and to make a positive purchase decision in the end.

Exploiting of all five senses in an integrated and consistent manner is an essential part of a sensory marketing concept. The more senses are engaged to create stimulation that has an aligned message, the more effective and long-lasting the impact will be.⁵⁰ The multi-sensory stimulations reinforce and strengthen each other's messages that lead to 'a stronger, more consistent, and more holistic perception'.⁵¹ As an example, during their campaign in South Korea, Dunkin Donuts sprayed coffee scent into busses, where

⁴⁷ Manzano Roberto, Serra Teresa, Davilan Diana, Sensory Marketing: Straight to the Emotions, 6.5.2019, <https://www.ie.edu/insights/articles/sensory-marketing-straight-to-the-emotions/>

⁴⁸ Degermen Erenkol Anil, Merve AK, Sensory marketing, Journal of Administrative Sciences and Policy Studies, June 2015, Vol 3, No 1, p 1-26, American Research Institute for Policy Development, <http://dx.doi.org/10.15640/jasps.v3n1a1Dr>

⁴⁹ Degermen Erenkol Anil, Merve AK, Sensory marketing, Journal of Administrative Sciences and Policy Studies, June 2015, Vol 3, No 1, p 1-26, American Research Institute for Policy Development, <http://dx.doi.org/10.15640/jasps.v3n1a1Dr>

⁵⁰ Pine Joseph B. II, Gilmore James H, Welcome to the experience economy, Harvard Business Review, July-August 1998, p 98, https://is.muni.cz/el/econ/jaro2020/MKR_PRCR/98252981/Pine_Gilmore_Welcome_to_the_Experience_Economy.pdf

⁵¹ Manzano Roberto, Serra Teresa, Davilan Diana, Sensory Marketing: Straight to the Emotions, 6.5.2019, <https://www.ie.edu/insights/articles/sensory-marketing-straight-to-the-emotions/>

simultaneously their ad was played forming a connection between the sound and sense and joining forced of two human senses. According to the company sources, their coffee sales increased by 29% during the campaign, and they saw an increased amount of store visits simultaneously.⁵² The aim in sensory marketing is to convey and channel a consistent and effective sensory branding to the consumers by using all relevant senses.

The concept of sensory marketing involves as well composing a sensory signature for the brand and identifying one or two identity-shaping senses that are acting as the main messengers towards consumers. Customers typically recognize products based on their name, logo or shape with our sense of vision and assess their functionality and purpose through a conscious process. When taste, texture, smell, or sound signs are used in brand building, consumers are utilising the emotion-linked senses of taste, touch, hear or smell to identify the product or service in a more unconscious process.⁵³ The choice which of the senses is most suitable to act as the primary connector between the consumer and brand depends for example on the desired and existing nature of the target audience, product characteristics and - category, and message that is desired to be conveyed.

2.2.3 Application and impact of scents in brand building and marketing

As stated earlier, brand builders are applying increasingly sensory and experience marketing techniques, and are utilizing senses of smell, taste, and touch in the process of impacting the consumer behavior. Due to their acknowledged power in marketing, scents are applied both to make the products more appealing, pleasant and user-friendly from consumer experience point view, but as well they are used as a tool to stand out from competing alternatives, to enable consumers to effectively and reliably identify the brand and to influence consumer behavior permanently.⁵⁴ Well-cited ‘Shannon-Weaver model’ on olfactory communication bearing the creators’ name states that odor is a message that contains information beyond its own existence, and air the medium carrying the message from the sender to the recipient that forms a communication channel available for marketers to use in their work on communicating with the target

⁵² <https://www.bonappetit.com/trends/article/dunkin-donuts-flavor-radio-sprays-the-smell-of-coffee-into-korean-buses-to-boost-sales>

⁵³ Manzano Roberto, Serra Teresa, Davilan Diana, Sensory Marketing: Straight to the Emotions, 6.5.2019, <https://www.ie.edu/insights/articles/sensory-marketing-straight-to-the-emotions/>

⁵⁴ Rathee Rupa, Rajain Pallavi, Sensory marketing – investigating the use of five senses, International Journal of Research in Finance and Marketing (IJRFM), Vol 7, Issue 5, May 2017, p 124-133, https://www.researchgate.net/publication/325682168_Sensory_Marketing-Investigating_the_Use_of_Five_Senses

consumer groups.⁵⁵ Multiple studies have been made to build theories on scent-based marketing, and their impact on the consumer behavior, experience and loyalty, and these will be explored in the next sections.

2.2.3.1 Transition from traditional to sense-based marketing

As a pioneer in the sense-based marketing, Kotler introduced already in 1974 a concept of atmospherics in his works to describe the interplay between store atmosphere, appeal of human senses and purchasing process.⁵⁶ After the first step taken by Kotler a number of studies have been conducted to show the positive impact that addressing five human senses in marketing has on consumers' purchasing behavior, including motivation, time and money spent, satisfaction and enjoyment.⁵⁷ Having said this still in 2005, qualitative and quantitative study by Lindstrom that involved 60 researchers, covered 13 countries and ran over period of 18 months confirmed that 99% of brand communication was still focused on only two of the senses, sight and sound, and many companies were unaware of potential and power of using all five senses or other than traditional sense stimulus in their brand building activities.⁵⁸

Recent research, however, indicates that marketing is about to enter, if has not already entered, a new era, where the quality of product is not the sole criteria based on which consumers make their purchasing decision, but instead consumers are seeking for an emotional connection with the brand and unique purchasing experience.⁵⁹ As one of the current leading academics in sensory marketing, Aradhna Krishna has described the evolution in marketing as follows: 'in the past, communication with customers were essentially monologues...then they evolved into dialogues, with customer providing

⁵⁵ Gosain Devashish, Sajwan Mohit, 'Aroma tells a Thousand Pictures: Digital Scent Technology a New Chapter in IT Industry', International Journal of Current Engineering and Technology, Vol 4, No. 4, August 2014,

https://www.researchgate.net/publication/281285713_Aroma_Tells_a_Thousand_Pictures_Digital_Scent_Technology_a_New_Chapter_in_IT_Industry

⁵⁶ Kotler Philip, Atmospherics as a marketing tool, Journal of Retailing, January 1974,

https://www.researchgate.net/publication/239435728_Atmospherics_as_a_Marketing_Tool

⁵⁷ Rathee Rupa, Rajain Pallavi, Sensory marketing – investigating the use of five senses, International Journal of Research in Finance and Marketing (IJRFM), Vol 7, Issue 5, May 2017, p 124-133,

https://www.researchgate.net/publication/325682168_Sensory_Marketing-Investigating_the_Use_of_Five_Senses

⁵⁸ Lindstrom Martin, Broad sensory branding, Journal of Product and Brand Management, 14(2), p 84-87, March 2005, https://www.researchgate.net/publication/247619884_Broad_sensory_branding

⁵⁹ Rathee Rupa, Rajain Pallavi, Sensory marketing – investigating the use of five senses, International Journal of Research in Finance and Marketing (IJRFM), Vol 7, Issue 5, May 2017, p 124-133,

https://www.researchgate.net/publication/325682168_Sensory_Marketing-Investigating_the_Use_of_Five_Senses

feedback. Now they are becoming multidimensional conversations, with products finding their own voices, and consumers responding.’⁶⁰ As stated earlier, a well-thought through sensory strategy can act as a powerful differentiator and build long-term connection with the consumer both on conscious and emotional levels that is increasingly recognized in the modern brand building and marketing approach. The marketing practices are going through a change from traditional approach of one-way communication and sight- and hear-based messaging towards a modern marketing that engages all senses to communicate and engage with the consumer.

2.2.3.2 Usage and impact of scents in brand building

Due to the close connection between scents, our long-term memory and emotions, scents as one form of stimuli can be utilised effectively and reliably to appeal to sense of smell alone or in a combination of several senses that are approached simultaneously in the activities. Consequently, brand owners have started to utilise scents in two-folded manner in their brand building activities: a) when a distinctive scent is connected to a product, it can be used to build strong brand recognition and identification, or b) scents may be used to create a suitable, ambient environment and circumstances that facilitate consumers’ willingness to purchase goods, like suggested by Kotler in the previously mentioned concept of atmospherics.⁶¹ In the former case, a scent is used as a sign to identify the source and distinguish product from those offered by the competition, even if consumers may not be able to verbally describe the connection, or consciously recognize the functioning of their olfactory memory. Examples of such products combining an unusual scent to a product are eucalyptus aromatised golf tees that are sold in Australia⁶² or bubble gum scented shoes that are marketed by Grendene of Brazil.⁶³ The former brand reasons utilisation of eucalyptus scent as providing a calming atmosphere for the consumers to play that may be seen as a functional characteristic of a product, while the latter has been registered as a scent trademark in the United States.

Conducted by Aradhna Krishna, May O. Lwin and Maureen Morrin, a well-cited study of 2009 on ‘olfaction, sense of smell and memory’ assessed whether product scents enhance

⁶⁰ Science of Sensory Marketing, published in March 2015, Harvard Business Review, <https://hbr.org/2015/03/the-science-of-sensory-marketing>

⁶¹ Rathee Rupa, Rajain Pallavi, Sensory marketing – investigating the use of five senses, International Journal of Research in Finance and Marketing (IJRFM), Vol 7, Issue 5, May 2017, p 124-133, https://www.researchgate.net/publication/325682168_Sensory_Marketing-Investigating_the_Use_of_Five_Senses

⁶² <https://www.aromatee.com.au/index.html>

⁶³ <http://www.grendeneusa.com/>

brand equity by improving consumers' ability to recall product related information over time.⁶⁴ Findings of this study demonstrated that product scent significantly enhanced consumers' ability to unaidedly recall a brand and associated product information over a period of two weeks in comparison to unscented alternatives, and created a long-lasting association between the product and the scent in the human memory. This study by Kirshna et al, that was conducted on pencils and tissues and aimed to test unaided recall without product or scent clues given, showed that consumers were not able to recall product information of an unscented item in 73% of the cases after two weeks, while in case of scented products this decline, and memory loss was only 8%. The researchers argued that this effect of improved recollection is caused by product scents' capability of making a product uniquely distinctive in its environment.

Basing on the previous research conducted by Meyers-Levy and Tybout in 1989, Krishna et al further presented a distinctiveness hypothesis stating that a distinctive scent stimulus in the environment triggers attention in our brains and focuses our resources to processing this received signal that in turn leads to this improved memory mark and better ability to recollect.⁶⁵ They further continued based on Schmidt's categorisation of distinctiveness that a stimulus may be unique because a) it differs from the alternatives and stands out in the prevailing environment (primary distinctiveness) or b) it may be perceived to be distinctive based on comparison against our prior experiences and accumulated knowledge (secondary distinctiveness).⁶⁶ An unusual scent added to a product is judged as abnormal in the context that causes memory mark to be stronger and consequently recollection easier. Krishna et al confirmed the above-described distinctiveness theory in their study and established that a scent is most impactful and effective in improving brand recollection, and memorising product information, when a distinctive scent is combined and placed on the product. A scent dispersed into a store or premises will trigger a pleasant and ambient environment, but this type of wide and vast scent application does not improve consumers' ability to memorise the brand or product information as attention and resources are diffused across many alternative

⁶⁴ Krishna Aradhna, Lwin May O, Morrin Maureen, Product Scent and Memory, *Journal of Consumer Research*, vol. 37, no. 1, 2010, pp. 57–67. JSTOR, www.jstor.org/stable/10.1086/649909

⁶⁵ Meyers-Levy Joan, Tybout Alice M, Schema Congruity as a Basis for Product Evaluation, *Journal of Consumer Research*, 16 (1), 39–54, https://www.researchgate.net/publication/24098594_Schema_Congruity_as_a_Basis_for_Product_Evaluation

⁶⁶ Schmidt Stephen R, Can We Have a Distinctive Theory of Memory?, *Memory and Cognition*, 19 (6), 523–42, 1991, https://www.researchgate.net/publication/21398090_Can_we_have_a_distinct_theory_for_memory

objects and focus diverted to the surroundings instead of the product. Further, if an alternative product possesses a same or similar scent, this will erode the ability of the original product and applied scent in combination to differentiate the brand from the competition and increases the likelihood of confusion. Consequently, a scent should be placed and connected directly to the product in question to be most impactful in creating brand recognition and applied to the surrounding environment and dispersed to several objects, if the ambition is to generate a pleasant purchasing process and user experience.

Considering the above presented usage of scents in brand building activities, Hammersley has presented categorisation of scents based on their purpose and function and suggests a division of scents into primary, secondary, and unique scents.⁶⁷ Primary scents are natural element or characteristic of a product itself that lack distinctiveness and are often functional. Secondary scents are additional scents that are added into a product to support its core function, such as creating a more amicable and ambient store experience. Unique scents are not connected to the product but added as an extraordinary element. According to Hammersley, both secondary and unique scents may be distinctive that enable consumers to distinguish products or services from their competing alternatives and facilitate consumers' purchasing decisions.

Since the post-war era, marketers have been adding scent that have been considered pleasant into their products in order to encourage consumers to select this particular product due its appealing characteristic.⁶⁸ The primary purpose has not been to differentiate the brand from others, but focus has been put on improving consumer experience and product performance. As an example, we find today in the super-markets multiple cloth detergents that all are capable of performing the basic function of effectively cleaning clothes based on their chemical composition, but that increasingly contain added, pleasant fragrances to further improve product performance, leaving a pleasant fragrance to the clothes after washing. In this case, a scent is an attribute of the product even if it may be unnatural or unique for a washing powder and added simply to enhance the product quality and consumers' perception of the product, not to act as a sign indicating the source of the product or distinguish it from the alternatives. This

⁶⁷ Hammersley Faye, *The Smell of Success: Trade Dress Protection for Scent Marks*, *Marquette Intellectual Property Law Review*, Volume 2, Article 4, p 124-126, 2018, <https://scholarship.law.marquette.edu/cgi/viewcontent.cgi?referer=https://www.bing.com/&httpsredir=1&article=1015&context=iplr>

⁶⁸ Kumar Abhijeet, *Protecting Smell Marks: Breaking Conventionality*, *Journal of Intellectual Property Rights*, Vol 21, p 129-139, May 2016, <http://nopr.niscair.res.in/bitstream/123456789/34726/1/JIPR%2021%283%29%20129-139.pdf>

situation is an example of Hammersley's concept of primary scent presented above that lacks distinctiveness and is functional in nature, and thus, indicates that using scents in this context should not be viewed as a unique sign possessing a capability to distinguish the brand or indicate the origin of a product in question.

According to Hammersley, secondary scents are applied to the surrounding environment to facilitate purchasing process and create a pleasant consumer experience. Examples of applying scents to create such an environment include Hilton hotel chain⁶⁹ that uses white tea and thyme as their signatory scent and Cathay Pacific airline⁷⁰ that spreads a well-recognizable scent to their lounges and airplanes to create a calm and comforting atmosphere. In the former case, the Hilton scent may be considered even a sign indicating the brand and the origin in addition to contributing to the atmospherics, while in the latter the scent is clearly applied as an element to influence customer experience. Crowley and Henderson concluded in their respective study that the pure presence of a pleasant smell in a store impacted consumers' perceptions positively, while the actual characteristics of a scent dispersed did not matter or impact the experience, indicating that such a scent applied in the atmospheric is not distinctive or unique.⁷¹

To summarise the presented argumentation, scents may be applied as unique scents on products to differentiate and distinguish brands from competing alternatives and to indicate the source of the goods. Scents may further be used as functional features to improve user experience or applied to the surroundings to create an ambient consumption or shopping environment. The demonstrated capability of a distinctive scent to act as a differentiating element suggests that a smell can fulfil the functions of a trademark of distinguishing and indicating the origin that is relevant from trademark protection point of view. James Hawes has stated that 'the central role of scents in products emphasizes the function of a smell that is not only to sell, but distinguish, and this raises the question why scents have not been seen and qualified as a trademark in the past'.⁷²

⁶⁹ <https://aromaretail.com/what-does-the-hilton-hotel-smell-like/>

⁷⁰ <https://www.air-aroma.com/clients/cathay-pacific>

⁷¹ Spangenburg Erik R, Crowley Ayn E, Henderson Pamela W, Improving the store environment: do olfactory cues affect evaluations and behaviors?, *The Journal of Marketing*, Vol 60, No 2 (April 1996), p 67-80, <http://www.jstor.org/stable/1251931>

⁷² Kumar Abhijeet, Protecting Smell Marks: Breaking Conventionality, *Journal of Intellectual Property Rights*, Vol 21, p 129-139, May 2016, <http://nopr.niscair.res.in/bitstream/123456789/34726/1/JIPR%2021%283%29%20129-139.pdf>

3 TRADEMARK LAW: SCENTS AS TRADEMARKS

3.1 Purpose and functions of a trademark

The main purpose of a trademark has been since its first appearance a) to indicate the origin of the goods or services, and b) to distinguish products carrying the trademark from the competing alternatives in the market.⁷³ As stated by Lisa P. Lukose, the history of trademarks extends as far as human history.⁷⁴ Our ancestors in ancient and highly civilized China are known to have signed their pottery works with a disguising sign already in 57BC to indicate the maker, city of manufacturing, and emperor in power at the time of manufacture. Archeological studies have found evidence of similar usage of signs in ancient city of Corinth of Greece, and amongst Romans, dating back to even earlier time, to 1300-1200BC.⁷⁵ Since those days the concept of trademark has evolved from a sign signaling the owner or producer of a good into an economic and legal concept that is commonly used in the course of trade, and possesses significant business and economic value as an intellectual property right that is worth registering and protecting.

The ability to indicate the source of a product is often regarded as the most important function of a trademark as it brings stability, security, and reliability to the market, and consequently facilitates smooth and efficient functioning of trade. Consumers associate quality images and assign performance expectations on products carrying a specific trademark based on their previous experiences or encounters with the trademark. These pre-built associations are a base on which consumers react to different alternatives available in the market and impact their purchase decisions and choices between them. Existence of trademarks makes selection process, purchase decisions and market transactions more efficient and reliable, when consumers can quickly recognize a product based on a trademark, save time by relying on the information provided by the mark, and do not have to inspect or test the merchandise in depth and in detail to eliminate risks prior to making the purchase.⁷⁶ Thus, from consumers' perspective, the purpose of a trademark is to provide reliable information on the source, quality, image

⁷³ Bodenhausen G. H.C, Guide to application of the Paris Convention for the protection of industrial property, p. 22, https://www.wipo.int/edocs/pubdocs/en/intproperty/611/wipo_pub_611.pdf

⁷⁴ Lukose Lisa P, Non-Traditional Trademarks: a Critique, Journal of the Indian Law Institute, Vol 57, No2 (April-June 2015), p.197-215, <https://www.jstor.org/stable/44782501>

⁷⁵ Diamond Sidney A, The historical development of trademarks, The Trademark Reporter 265 (1975), <https://heinonline.org/HOL/LandingPage?handle=hein.journals/thetmr65&div=39&id=&page=>

⁷⁶ Mishra Neha, Registration of non-traditional trademarks, National Law School of India, Received 27.7.2002, revised 22.11.2007, Journal of Intellectual Property Rights, vol 13, January 2008, p43-50, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3147369

and reputation of a product, and protect against confusing the goods with similar alternatives available in the market through the distinguishing function of a trademark. Trademarks safeguard economic efficiency of purchasing process in the market.⁷⁷

Trademarks are one of the most valuable assets companies own in today's business. According to Brand Finance, Apple's trademark is one of the most valuable trademarks currently with an estimated value of US\$263 billion, while its fierce competitors for the most valuable brand title, Amazon and Google, are estimated to be at US\$254 billion and US\$191 billion in value, respectively.⁷⁸ From trademark holders' perspective, trademark, as a legal concept protects investments made by the owner on the brand, and consequently on the trademark, and provides business security and stability to the trademark holder. Trademarks are a vehicle that can be deployed in advertising and used as a communication channel between the consumer and the brand. This requires significant effort and time as well as financial resources to be created, but when correctly deployed it generated goodwill in consumers' mind that is hard to replace or copy. Trademark represents something beyond the natural elements of a product itself, has a capacity to store, carry, and convey messages, transmit an image or feeling between the trademark owner, brand, and potential customer base. The aim of a trademark is to become positively distinguished from alternatives and ensure that consumers recognize and recall the brand.⁷⁹

Trademark is inherently a commercial concept and build on the economic reasoning, while other forms of intellectual properties focus on promoting innovation, and protecting designs and creative works.⁸⁰ Registration of e.g. a scent mark as a trademark provides the trademark proprietor with a mandate 'to isolate an appropriate olfactory sign from the common sensory wealth and transform it into a sign' that performs as a

⁷⁷ Wolangiewicz, How, it at all, should the law of trademarks adapt to the rise of sensory marketing?, *Wroclaw Review of Law, Administration & Economics*, 7(2), p40-57, December 2018, https://www.researchgate.net/publication/329343664_How_if_at_All_should_the_Law_of_Trademarks_Adapt_to_the_Rise_of_Sensory_Marketing

⁷⁸ Brand Finance Global 500 2021, 'Apple bites back reclaiming position of world's most valuable brand from Amazon, <https://brandirectory.com/rankings/global/>

⁷⁹ Wolangiewicz, How, it at all, should the law of trademarks adapt to the rise of sensory marketing?, *Wroclaw Review of Law, Administration & Economics*, 7(2), p40-57, December 2018, https://www.researchgate.net/publication/329343664_How_if_at_All_should_the_Law_of_Trademarks_Adapt_to_the_Rise_of_Sensory_Marketing

⁸⁰ Calboli Irne, Hands Off My Colors, Patterns, and Shapes! How Non-traditional Trademarks Promote Standardization and May Negatively Impact Creativity and Innovation, Texas A&M University School of Law, <https://scholarship.law.tamu.edu/cgi/viewcontent.cgi?article=2346&context=facscholar>

trademark.⁸¹ A trademark owner gets an exclusive right to use the trademark for the same or similar goods for a period of ten year with a possibility to renew this protection until perpetuity, and can forbid others from exploiting and using the mark without permission and authorization. In contrast to other intellectual properties that protect a specific innovation, creative work or design, the purpose of trademark is to protect the formed connection between the scent and the product with which it is associated, not the product as such. Trademark protection aims to ensure that the trademark into which the owner has invested to establish a certain market position, quality image and reputation is not exploited unfairly by another company, and that public is not consequently misled and deceived by the competing alternative.⁸² Because trademark protection in practice can last for eternity with regular renewals, trademark registration and protection tend to be generally more appealing for companies seeking to protect their signs than for example patent, copyright or design rights, even if these were applicable.

3.2 Scents as a non-traditional trademark

While we as consumers are customised to encounter visually perceivable marks in our daily life that are often regarded as conventional formats of trademarks, the emerge of non-traditional elements, such as scents, textures, or tastes in brand building and consequently in trademark arena is evident. This increasing usage of unconventional signs has led gradually to the need to agree on the terminology on how we refer to these new trademark types. Consequently, the World Intellectual Property Office (WIPO) Standing Committee on Trademarks, Industrial Designs and Geographic Indications (SCT) agreed in 2007 to harmonize vocabulary and utilize the term 'non-traditional trademark', when referring to the emerging new type of signs instead of using descriptions such as nonconventional, unusual, or new type of signs.⁸³

Based on their duration of usage in trade and nature, trademarks can be divided into traditional and non-traditional trademarks. Traditional trademarks can be mostly

⁸¹ Karapapa Stavroula, Registering scents as community trademark, *Trademark Reporter*, 100(6), pp 1335-1359, https://www.researchgate.net/publication/322702550_Registering_scents_as_community_trade_marks

⁸² Kumar Abhijeet, Protecting Smell Marks: Breaking Conventionality, *Journal of Intellectual Property Rights*, Vol 21, p 129-139, May 2016, <http://nopr.niscair.res.in/bitstream/123456789/34726/1/JIPR%2021%283%29%20129-139.pdf>

⁸³ Mishra Neha, 'Registration of non-traditional trademarks', National Law School of India University, November 2007, https://www.researchgate.net/publication/298463513_Registration_of_non-traditional_trademarks

represented graphically, and consist typically for example of words, figures and logos.⁸⁴ Non-traditional trademarks cover a large scope of marks that may consist of such elements as sound, taste, colour, position, olfactory and texture-based signs. Non-traditional marks are seldom utilized in isolation, but often in addition to visual marks.⁸⁵

Trademarks can be further categorised as visual and non-visual marks based on the sense used to observe the sign.⁸⁶ The former can be perceived by sight, such as words, logos, shape and position, multi-media, or three-dimensional marks. Non-visual marks on the other side are perceived by other human senses than sight or as a combination of them, and include such as sound, texture, taste, and olfactory marks.⁸⁷

Olfactory marks that is the topic of this thesis are both non-traditional and non-visual that make them particularly challenging from identification, representation, replication and storing perspective.

3.3 Legislation and agreements governing non-traditional trademarks

As traditional trademarks have been used in the trade for a significant period of time and still today represent the majority of the trademarks in use, the prevailing legislation governing and protecting trademarks has been developed based on the characteristics of the conventional and visual marks. The non-traditional marks have gain more significant role in the marketing activities regardless of the lack of legal protection and become a permanent element in branding products during the past decade.⁸⁸ Consequently, the pressure has been put on legislators to accept that non-traditional marks may potentially fulfil the functions of a trademark and urged them to consider how these new types of signs could be protected and covered in the prevailing rules and regulations. Trademark law has attempted to follow the development of brand management practices and emerge of non-traditional signs in the market. We have seen both international agreements being amended to take into consideration these new types of signs appearing

⁸⁴ Mishra Neha, 'Registration of non-traditional trademarks', National Law School of India University, November 2007, https://www.researchgate.net/publication/298463513_Registration_of_non-traditional_trademarks

⁸⁵ Kapoor Sanya, Gupta Riya, The five senses and non-traditional trademarks, Amity Law School, published 2018, <https://supremoamicus.org/wp-content/uploads/2018/10/V8A26.pdf>

⁸⁶ Kapoor Sanya, Gupta Riya, The five senses and non-traditional trademarks, Amity Law School, published 2018, <https://supremoamicus.org/wp-content/uploads/2018/10/V8A26.pdf>

⁸⁷ Carapeto Roberto, A reflection about the introduction of non-traditional trademarks, Waseda Bulletin of Comparative Law Vol.34, p 25-26, 2016, <https://www.waseda.jp/folaw/icl/assets/uploads/2016/02/c35688e10d1c61201172065546b98301.pdf>

⁸⁸ Lukose Lisa P, Non-Traditional Trademarks: a Critique, Journal of the Indian Law Institute, Vol 57, No2 (April-June 2015), p.197-215, <https://www.jstor.org/stable/44782501>

in the trademark arena, and regional as well as local laws being drafted in the same spirit. Non-visual sound marks, which can be described reliably based on notes and presented through a durable recording, and colour marks, which can be identified based on the undisputable colour categorisation system such as Pantone or RAL, have been recognized as possible trademarks, and can, by definition, be registered to gain protection as a trademark. Despite this development, still today the prevailing legislation is better fit to protect the traditional marks, and protection of some of the non-traditional trademarks, particularly scent, taste, and texture marks, continue to pose a challenge for the legislators due to their wide spectrum and unusual nature.

Even if the international community has been able to agree to use the term, non-traditional trademark, when referring to the marks formed based on unconventional elements, the attempts to agree on a more detailed definition on which type of sign elements in specific constitute a non-traditional mark have not been successful. Further, international forums have not yet been able to agree on a harmonized protection of non-traditional trademarks across the global arena, but first steps have been taken to recognize the existence of non-traditional trademarks in the international treaties and minimum standards for harmonized treatment have been set. While international law does not include a mandatory, harmonized protection of non-traditional trademarks, it does open a window of opportunity for the national legislators to allow registration and protection of non-traditional trademarks if they so desire.

The next section will present the prevailing legal framework governing non-traditional trademarks, and particularly scent marks by discussing first the relevant international conventions and agreements, and then focusing on the European Union trademark law in more detail.

3.3.1 International Conventions and Agreements

International conventions and agreements are building the basis for protection of intellectual property globally. Out of these treaties, Paris Convention of 1883 governed by World Intellectual Property Office (WIPO) and the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS) of 1994⁸⁹ administrated by World Trade Organisation (WTO) contain international legislation on protection of non-traditional trademarks, and consequently, these treaties are relevant, when discussing protection of

⁸⁹ World Trade Organisation, Agreement on Trade Related Aspects on Intellectual Property Rights, https://www.wto.org/english/docs_e/legal_e/31bis_trips_01_e.htm

scent marks in the global arena. Additionally, Trademark Law Treaty of 1994 (TLT) and Singapore Treaty of 2006 provide interesting perspectives on how the international opinion has evolved over the decade between the treaties in opening and acknowledging the possibility to register non-traditional signs as trademarks. Standing Committee on Law of Trademarks, Industrial Designs and Geographic Indications (SCT) has made progress in harmonizing the treatment of non-traditional signs across the WIPO members, but not yet concerning the olfactory signs. The next section discusses the mentioned international treaties and agreements from the perspective of non-traditional and scent mark protection.

3.3.1.1 Paris Convention (1883)

The Paris Convention signed in 1883 and administrated by World Intellectual Property Office (WIPO) is one of the first international treaties governing protection of intellectual property rights.⁹⁰ The Paris Convention does not include an agreed or defined definition of a trademark or regulate the subject matter in detail. During the discussions, the member states were not able to reach a consensus on the specific definition and content of signs to be included under trademark. Thus, as a consequence of this loose formulation Paris Convention does not stipulate that a particular non-traditional mark must gain legal protection as a trademark, nor does it state the opposite, leaving the window open for this interpretation and approach, if so desired in the signing country. The Article 6 of Paris Convention states that the conditions for filing and registering trademarks are to be determined in each country in the national laws, and further addresses prevention of unfair competition in Article 10bis that is as well left for the signing parties to regulate nationally.⁹¹

The Paris Convention contains so called 'telle quelle' principle in Article 6quinquies that stipulates that a member state must 'accept for registration and protection 'as is' a trademark, if it has been duly registered in the country of origin of a proprietor'.⁹² The provision further details that there are four exceptions that allow deviation of the 'telle quelle'-principle: a) in case the trademark conflicts with an earlier trademark or right of

⁹⁰ World Intellectual Property Office (WIPO), information on the Paris Convention of 1883, <https://www.wipo.int/treaties/en/ip/paris/>

⁹¹ World Intellectual Property Office (WIPO), The Paris Convention for the protection of industrial property, Article 6 and 10, https://wipolex.wipo.int/en/text/288514#P147_20484

⁹² Ng-Loy Wee Loon, 'Absolute Bans on the Registration of Product Shape Marks, a Brach of International Law?', *The protection of non-traditional trademarks – critical perspective*, Chapter 7, p149, Oxford Press, 2018

a third party in the country where registration is sought, b) the trademark lacks distinctiveness, c) trademark is contrary to morality of public order or d) if Article 10bis on unfair competition applies. As the European Union and former European Community countries are members of the Paris Convention, this means that they are obliged to accept and reciprocally recognize the non-traditional trademarks that are registered in another country that is signatory of the Paris Convention.⁹³ As we see the use of non-traditional elements becoming even more popular in brand management, this provision may prove to be a significant principle for mutually recognizing non-traditional trademarks between regions, and particularly in case of scent marks as we have seen some of the countries, like the United States, approaching this type of signs less strictly than the European Union, and allowed registration of scent marks already at this stage.

3.3.1.2 *TRIPS – Agreement (1994)*

The Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS) governed by World Trade Organisation (WTO) is the most comprehensive multilateral agreement governing intellectual property rights (IPR).⁹⁴ The agreement was originally negotiated in the Uruguay Round of General Agreement of Tariffs and Trade (GATT) 1986-1994 and sets the minimum standard for regulations to be implemented in the member states on trademarks, copyright and related rights, industrial designs, patents, and geographical indications.

In relation to trademark protection, the agreement includes a description of protectable subject matter in Article 15 and defines it as follows based on the basic functions of a trademark:

‘Any sign, or any combination of signs, capable of distinguishing the goods or services of one undertaking from those of other undertaking shall be capable of constituting a trademark’.⁹⁵

Instead of taking a stance on specifically which type of sign formats may be registered and gain trademark protections, TRIPS-agreement puts focus in the above quoted section of article 15 on the core function of a trademark, namely indicating the source of

⁹³ Friedman Danny, EU opened door for sound marks, will scents follow?, *Journal of Intellectual Property Law and Practice*, Oxford University Press, December 2015, p931-939, <https://www.researchgate.net/publication/284564005>

⁹⁴ World Trade Organisation, information on TRIPS, <https://www.wto.org/trips>

⁹⁵ World Trade Organisation, The Agreement on Trade Related Aspects of Intellectual Property Rights, Article 15, https://www.wto.org/english/docs_e/legal_e/31bis_trips_04_e.htm#2

the product of service, and emphasizes consequently, distinctiveness of a sign as a starting point and pre-condition for trademark protection.⁹⁶ This is a wide and open definition of the possible protectable subject matters that leaves the ontology, that is the format of the signs to be protected aside and puts emphasis on the functional capacity of a sign as a trademark in the center, as argued by Dinwoodie.⁹⁷ The definition has been interpreted and may be criticized to indicate an attempt to allow registration of any sign that is distinctive.

In the background and like in case of Paris Convention, the signing states were not able to agree on the exact definition of what type of marks may constitute a trademark during the negotiations, and consequently left the freedom to the member states to decide on the type of marks protected under their national laws. The article 15 explains the protectable subject matter in more detail by outlining that names, letters, numerals, figurative elements, colors as well as any combination of such marks qualify for trademark registration given their inherently distinctive nature in the context, and notes that a sign originally lacking distinctiveness may acquire the position of a protected trademark through use (acquired distinctiveness). The presented list of signs eligible for trademark protection is broad and not exhaustive, indicating that both traditional and non-traditional signs may be included and considered. Further, in the same spirit, the article 15 includes a clause saying that ‘members may require as a condition for registration that signs need to be visually perceptible’. This means that a non-traditional sign with a distinctive character, such as a specific scent, that does not have a visual appearance may be registered as a trademark, if graphical representation is not required based on the national legislation. As a consequence of not being able to achieve an agreement on the detailed definition of a trademark, the agreement leaves it for the national legislators in practice to make the decision not only if and when non-visual signs can be protected as a trademark, but as well under which conditions.

3.3.1.3 Trademark Law Treaty (1994) and Singapore Treaty (2006)

The Trademark Law Treaty (TLT) of 1994 that is administrated under WIPO aims to standardize the national and regional procedures and processing of trademark

⁹⁶ World Trade Organisation, The Agreement on Trade Related Aspects of Intellectual Property Rights, Article 15, https://www.wto.org/english/docs_e/legal_e/31bis_trips_04_e.htm#2

⁹⁷ Dinwoodie Graeme B, The Death of Ontology: A Teleological Approach to Trademark Law, Chicago-Kent College of Law, January 1999, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=205328

registration.⁹⁸ Similarly, the Singapore Treaty on the Law of Trademark of 2006⁹⁹ and its regulations¹⁰⁰ governed under WIPO focuses on modernizing the administrative trademark procedures.¹⁰¹ While both treaties concern mainly the procedural law rather than the content of the legislation, they make references to non-traditional trademarks in different manners that gives an indication that legislation is evolving towards incorporating the non-traditional marks as potential signs eligible for trademark filing, registration and protection.¹⁰²

The Trademark Law Treaty that was signed a decade earlier than the Singapore Treaty remains silent on the exact definition of a trademark, but clearly states in the Article 2 that ‘this treaty shall not apply to hologram marks and to marks not consisting of visible signs, in particular sound and olfactory marks.’¹⁰³ Trademark Treaty of 1994 is the only international agreement or treaty that explicitly excludes scents from the list of eligible signs that could function as a trademark.¹⁰⁴ The Singapore Treaty dating back to 2006, on the other hand, describes the provisions on filing of non-traditional trademarks, both visual and non-visual, such as holograms, sounds and smell, in case registration is allowed based on the national jurisdiction.¹⁰⁵ As a treaty focused on procedure harmonization, the Singapore Treaty does not set an obligation to accept non-traditional trademarks by the signing countries, but it clearly reflects the ambition to make registration of non-traditional marks possible, and guides on the procedures for filing and processing applications in case protection is granted for non-traditional trademarks.¹⁰⁶ What is significant in the Singapore Treaty is that in comparison to the Trademark Law Treaty, it explicitly names non-traditional, and non-visual trademarks

⁹⁸ World Intellectual Property Office, information on the Trademark Law Treaty (TLT), https://www.wipo.int/treaties/en/ip/tlt/summary_tlt.html

⁹⁹ World Intellectual Property Office, The Singapore Treaty on the Laws of Trademark (2006), <https://wipolex.wipo.int/en/text/290013>

¹⁰⁰ World Intellectual Property Office, Regulations under the Singapore Treaty on the Laws of Trademark (as in force on November 1, 2011), <https://wipolex.wipo.int/en/text/290032>

¹⁰¹ World Intellectual Property Office, information on the Singapore Treaty on the Law of Trademark, <https://www.wipo.int/treaties/en/ip/singapore/>

¹⁰² Carapeto Roberto, A reflection about the introduction of non-traditional trademarks, *Waseda Bulletin of Comparative Law Vol.34*, p.30, <https://www.waseda.jp/foaw/icl/assets/uploads/2016/02/c35688e10d1c61201172065546b98301.pdf>

¹⁰³ World Intellectual Property Office (WIPO), Trademark Law Treaty, 1994, <https://wipolex.wipo.int/en/text/294358>

¹⁰⁴ Karapapa Stavroula, Registering scents as community trademark, *The Trademark Reporter*, 100(6), pp 1335-1359, https://www.researchgate.net/publication/322702550_Registering_scents_as_community_trade_marks

¹⁰⁵ World Intellectual Property Office (WIPO), The Singapore Treaty on the Laws of Trademark, 2015, https://www.wipo.int/edocs/pubdocs/en/wipo_pub_508.pdf

¹⁰⁶ Calboli Irene, Sentfleben Martin, *the Protection of Non-traditional trademarks, critical perspectives*, Oxford University Press, 2018, p1-2

and lists specific types of unconventional signs that could be registered as trademarks to gain protection given that other conditions stipulated in the national legislation are met.¹⁰⁷

3.3.1.4 Standing Committee on Law of Trademarks, Industrial Designs and Geographic Indications

The Standing Committee on Law of Trademarks, Industrial Designs and Geographical Indications (SCT) of World Intellectual Property Organization (WIPO) was formed in 1998 to act as a forum to discuss the development of international law governing trademarks, industrial designs and geographic indications, to co-ordinate and provide guidance on harmonizing the national laws and regulations related to these areas.¹⁰⁸

The forum entered into a dialogue and collected input from member states from 2006 until 2009 with the ambition to find a common understanding on the representation of emerging non-traditional trademark types.¹⁰⁹ In May 2009, SCT stated that while they were able to identify areas of converge in case of such marks as three-dimensional, color, hologram signs, they were not able to agree on the common required representation of olfactory marks in the negotiations.¹¹⁰ The Committee noted in its announcement that ‘while some jurisdictions accept representation of scent marks based on a written description, in certain jurisdictions a pure description is not adequate for representation’, and reconfirmed the principle that each country determines the approach to scent sign filing, registration and protection in their national laws.

In the same context SCT revealed that according to a survey conducted by WIPO in 2009, 28% that is 20 out of 72 offices responded that they accept registration of scent signs as trademarks, if the application fulfills the preconditions set for registration.¹¹¹ The Committee stated in the announcement on ‘New Types of Trademarks’ released in 2006 after the 16th SCT session that if a scent mark fulfills the requirements set for trademark

¹⁰⁷ World Intellectual Property Office (WIPO), WIPO Magazine, Non-traditional Marks – Singapore Treaty enters into Force, 1/2009, https://www.wipo.int/wipo_magazine/en/2009/01/article_0002.html

¹⁰⁸ World Intellectual Property Office (WIPO), information on Standing Committee on Law of Trademark, Industrial Designs and Geographic Indications, <https://www.wipo.int/policy/en/sct/>

¹⁰⁹ World Intellectual Property Office (WIPO), Announcement from 17th session on May 7 to 11, 2007, https://www.wipo.int/edocs/mdocs/sct/en/sct_17/sct_17_3.pdf

¹¹⁰ World Intellectual Property Office (WIPO), Standing Committee on the Law of Trademarks, Industrial Designs and Geographical Indications (SCT), ‘Representation of non-traditional marks areas of convergence’, 5.5.2009, https://www.wipo.int/export/sites/www/sct/en/meetings/pdf/wipo_strad_inf_3.pdf

¹¹¹ World Intellectual Property Office (WIPO), Announcement from 16th session on Nov 13 to 17, 2006 https://www.wipo.int/edocs/mdocs/sct/en/sct_16/sct_16_2.pdf

registration, there should be no reasons to object such registration.¹¹² According to this statement, it was suggested in the discussions that the process for determining whether an unconventional sign is eligible to function as a trademark should focus on determining whether it fulfills the function of a trademark effectively that is in line with the approach taken in the TRIPS – agreement, and reflects the wide and open, inclusive definition of possible signs that can act as a trademark.¹¹³ This approach resembles the observation made by Dinwoodie, where the ontology of signs, meaning the technical description of a sign that can be registered as a trademark is put aside in the legal framework, and the new emerged definition of trademark emphasizes the signs capability to function as a trademark as a pre-condition for registration.¹¹⁴ According to the Committee this approach means assessing the status and capability of a scent to act as a trademark through the following three aspects: a) whether the applicant is the only user of a particular scent in the proposed context and applies actively it in marketing activities, b) whether the target market determines the origin of the goods or services and differentiates them from the alternatives based on the suggested smell and c) through determining whether the scent is a natural or functional characteristic of a product or service, or an addition to the product or service.¹¹⁵ By proposing this approach, the SCT seeks to confirm that a particular sign to be registered as a trademark would not only be a distinctive and unique product features, but a sign with the capacity and capability to extend beyond to signal the source of the products, fulfill the distinguishing function and convey messages between the brand and the consumers.

In summary, international agreements and treaties form the foundation and set a minimum standard for protection of trademarks. In case of non-traditional signs, the treaties mostly remain silent and do not explicitly exclude the nontraditional signs from the scope of trademark protection, indicating that unconventional marks are eligible trademarks and included into ‘the broad and non-specific definition of eligible subject matter under trademark law’.¹¹⁶ The trademark legislation focuses more on the functions

¹¹² World Intellectual Property Office (WIPO), Announcement from 16th session on Nov 13 to 17, 2006 https://www.wipo.int/edocs/mdocs/sct/en/sct_16/sct_16_2.pdf

¹¹³ World Intellectual Property Office (WIPO), Announcement from 17th session on May 7 to 11, 2007, https://www.wipo.int/edocs/mdocs/sct/en/sct_17/sct_17_3.pdf

¹¹⁴ Dinwoodie Graeme B, *The Death of Ontology: A Teleological Approach to Trademark Law*, Chicago-Kent College of Law, January 1999, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=205328

¹¹⁵ World Intellectual Property Office (WIPO), Announcement from 16th session on Nov 13 to 17, 2006 https://www.wipo.int/edocs/mdocs/sct/en/sct_16/sct_16_2.pdf

¹¹⁶ Karapapa Stavroula, *Registering scents as community trademark*, *The Trademark Reporter*, 100(6), pp 1335-1359, https://www.researchgate.net/publication/322702550_Registering_scents_as_community_trade_marks

of a trademark than ontology, meaning that any sign that is able to function as a trademark should be registered regardless of the actual composition and ‘technical features’ of a sign.¹¹⁷ The minimum standard set in the treaties is that a sign eligible for trademark registration and protection must be able to indicate the source of the products and distinguish them from the alternatives on the market, that is to be distinctive. The agreements leave the freedom to the member states to determine the representation requirements for trademark registration and protection applied for different type of unconventional marks, such as scents. Thus, as an example, a member state may determine on whether protection is denied in case of scents that lack visual appearance or granted based on the use of a scent mark in the function of a trademark. Despite the ambitions to extend and widen the trademark protection to cover non-traditional signs, the reality in the registration system and procedures is that they are still more fitted to serve the traditional trademark types, due to for example the failure of the non-traditional marks to effectively fulfill the representation requirements.¹¹⁸

3.3.2 Legislation on non-traditional trademarks in European Union

As the main principle, national laws within the European Union govern trademarks, while steps have been taken towards a more harmonized European trademark legislation during the last years, and a region-wide solution has been implemented in the form of European Union Trademark. In line with the ideology and reasonings behind forming the European Union in the first place, the main driver for the harmonization effort of trademark legislation and the related legal framework in general has been the ambition to safeguard the free movement of goods and services, facilitate free trade and competition in the region, and strengthen the overall competitiveness of the European Union in the global arena.

In terms of prevailing legislation in the European Union, Trademark Directive 2015/2436¹¹⁹ and Trademark Regulation 2015/2424¹²⁰ aim to harmonize the trademark

¹¹⁷ Kumar Abhijeet, Protecting Smell Marks: Breaking Conventionality, *Journal of Intellectual Property Rights*, Vol 21, p 129-139, May 2016,

<http://nopr.niscair.res.in/bitstream/123456789/34726/1/JIPR%2021%283%29%20129-139.pdf>

¹¹⁸ Kumar Abhijeet, Protecting Smell Marks: Breaking Conventionality, *Journal of Intellectual Property Rights*, Vol 21, p 129-139, May 2016,

<http://nopr.niscair.res.in/bitstream/123456789/34726/1/JIPR%2021%283%29%20129-139.pdf>

¹¹⁹ Directive (EU) 2015/2436 of the European Parliament and of the Council of 16 December, 2015 to approximate the laws of the Member States relating to trade marks, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32015L2436>

¹²⁰ Regulation (EU) 2015/2424 of the European Parliament and of the Council of 16 December 2015 amending Council Regulation (EC) No. 207/2009 on the Community trade mark and Commission

law in the member countries and set region-wide requirements on the trademark protection on the nations that are in line with the international treaties and agreements, such as TRIPS- agreement and Singapore Treaty, governing intellectual property rights and trademark questions. The principle of co-existence or dual protection is one of the particularities and essential elements of the trademark system in the European Union.¹²¹ Trademarks get legal protection primarily through national legislations and registration in the European Union member states. Former Community Trademark that is today known as European Trademark co-exists with national trademarks as stipulated in amending Trademark Regulation 2015/2424¹²² and in Regulation on the European Union Trademark 2017/1001¹²³ and forms an option for a brand owner to seek protection for their trademark in the European Union.

3.3.2.1 Impact of Trademark Reform of 2017 in European Union

In the early 2010's, the European Union faced pressure to harmonize the trademark registration system in the region to 'make it cheaper, quicker and more reliable', and 'consistent as a whole'. It needed to adapt to the prevailing business environment that was more and more relying on sensory and experience marketing and build readiness to accommodate the emerge of new type of trademarks in the market.¹²⁴ Consequently, the preparations for the trademark reform of 2017 were started with the aim to streamline

Regulation (EC) No 2868/95, implementing Council Regulation (EC) No 40/94 on the Community trade mark and repealing Commission Regulation (EC) No 2869/96 on the fees payable to the Office for Harmonisation in the Internal Market, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32015R2424>

¹²¹ Max Planck Institute for Intellectual Property and Competition Law, 'Study on the Overall Functioning of the European Trade Mark System, 15.2.2011, <https://op.europa.eu/en/publication-detail/-/publication/5f878564-9b8d-4624-ba68-72531215967e>

¹²² Regulation (EU) 2015/2424 of the European Parliament and of the Council of 16 December 2015 amending Council Regulation (EC) No. 207/2009 on the Community trade mark and Commission Regulation (EC) No 2868/95, implementing Council Regulation (EC) No 40/94 on the Community trade mark and repealing Commission Regulation (EC) No 2869/96 on the fees payable to the Office for Harmonisation in the Internal Market, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32015R2424>

¹²³ Regulation (EU) 2017/1001 of the European Parliament and of the Council of 14 June 2017 on the European Union trade mark, <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32017R1001>

¹²⁴ Grubler Ulrike, 'A new chapter in EU trademark reform: Changes from October 1 2017', Business Law Magazine, 7.9.2017, <https://www.deutscheranwaltspiegel.de/businesslaw/archiv/a-new-chapter-in-eu-trademark-reform-changes-from-october-1-2017/>

trademark proceedings in terms of speed, cost and procedures and increase legal certainty and predictability of registration and protectability of eligible signs.¹²⁵

In conjunction with the reform of 2017, the European Union ordered ‘a study on the overall functioning of the European trademark system’ from Max Planck Institute for Intellectual Property and Competition Law.¹²⁶ Amongst other findings and recommendations, the study concluded that ‘the requirement for graphical representation should be removed in order to create an opportunity for other forms of representation to develop that may be as reliable and informative as graphical representation.’ This previous requirement had led into a situation, where traditional signs enjoyed a better position in front of the law in comparison to non-traditional signs that were becoming more and more popular. Further, trademarks that were in other aspects qualifying and fulfilling the requirements, such as were distinctive and capable of performing the functions of a trademark, failed the registration due to the technical requirement of graphical representation. The conclusion of the study stated that requiring a visual appearance from a trademark did not any longer correspond to the prevailing marketing or business practices, and the European Union needed to consider the impact of the emerge of non-traditional and non-visual trademarks and take this into account in the new legal framework governing trademarks in the region.

In the preparatory work behind the amendments made to Council Regulation (EC) No 207/2009 on the Community Trademark that lead to the new European Trademark Regulation 2017/1001, the Legal Committee of European Parliament voiced the reasoning for omitting the graphical representability from the definition of the European Union trademark in line with the Max Planck study.¹²⁷ The Legal Committee argued for the stability and efficiency gains in its report and stated that the amendments were aimed ‘to allow more flexibility while ensuring greater legal certainty’ and were aimed ‘to create a system that was more accessible and efficient for businesses in terms of lower costs and

¹²⁵ European Intellectual Property Office, EU Trademark Reform Summary of changes applying from 1 October 2017, https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/contentPdfs/law_and_practice/legal_reform/Overview_changes_en.pdf

¹²⁶ Friedman Danny, EU opened door for sound marks, will scents follow?, *Journal of Intellectual Property Law and Practice*, Oxford University Press, December 2015, p931-939, <https://www.researchgate.net/publication/284564005>

¹²⁷ Report on the proposal for a regulation of the European Parliament and of the Council amending Council Regulation (EC) No 207/2009 on the Community trade mark (COM(2013)0161 – C7 0087/2013 – 2013/0088(COD)), https://www.europarl.europa.eu/doceo/document/A-7-2014-0031_EN.html?redirect

complexity, increased speed, greater predictability and legal security'.¹²⁸ The opinion of the Legal Committee further continued to reason the changes based on the development of the technology that may enable us to identify, reproduce and store currently perishable or vague signs reliably in the future by stating that 'a sign should...therefore be permitted in any appropriate form, taking account of generally available technology which enables the competent authorities and the public to determine with precision and clarity the subject matter of protection'. Mirroring the Legal Committee's opinion that a sign should be represented in a clear, precise, self-contained, easily accessible, durable and objective manner, the final formulation of the European Trademark Regulation 2017/1001¹²⁹ states in Article 4 and Trademark Directive 2015/2436¹³⁰ in the Article 3 that a trademark 'may consist of any signs...capable of...being represented... in a manner which enables the competent authorities and the public to determine the clear and precise subject matter of protection afforded to its proprietor'.

When considering the non-traditional trademark, and olfactory signs in particular, the most significant amendment in the European Union legislation as a consequence of the reform was the abolishment of the graphical representation requirement from the registration pre-conditions. This removal meant that as of 2017 onwards in principle non-traditional signs such as shapes, designs, patterns, sounds, multimedia, motion, holograms, tastes - or possibly scents or a combination of these are now eligible for trademark registration in European Union given that they satisfy the other currently prevailing pre-conditions. As European Union removed previously explicitly stated requirement of graphical representation, it created a window of opportunity for currently known non-traditional signs to act as registered trademarks, it left the formulation open for adopting new technological solution and expanded the scope to include possible new sign types that may appear in the market. The fact, however, remains that even if graphical representation is not anymore required, scent signs must be described in a

¹²⁸ Report on the proposal for a regulation of the European Parliament and of the Council amending Council Regulation (EC) No 207/2009 on the Community trade mark (COM(2013)0161 – C7 0087/2013 – 2013/0088(COD)), https://www.europarl.europa.eu/doceo/document/A-7-2014-0031_EN.html?redirect

¹²⁹ Regulation (EU) 2017/1001 of the European Parliament and of the Council of 14 June 2017 on the European Union trade mark, <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32017R1001>

¹³⁰ Directive (EU) 2015/2436 of the European Parliament and of the Council of 16 December, 2015 to approximate the laws of the Member States relating to trade marks, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32015L2436>

clear and precise form that fulfills the representation requirement that has not been without challenges as will be discussing later in this thesis.

As an outcome of the reform, the cornerstones of the trademark protection in European Union are as of today the formerly mentioned new Trademark Directive 2015/2436, which replaced Directive 2008/95/EC, the Trademark Regulation 2015/2424, and the Regulation on the European Union Trademark 2017/1001, which replaced the previous Council Regulation No 207/2009.

3.4 Legal protection of scent marks in the European Union

In line with the minimum standard set in such international treaties as TRIPS-Agreement, Trademark Directive 2015/2436¹³¹, Trademark Regulation 2015/2424¹³² as well as Regulation on the European Union Trademark 2017/1001¹³³ define the protectable subject matter in the European Union as follows:

A trademark or EU trademark may consist of any signs, in particular words...or designs, letters, numerals, colors, the shape of goods or the packaging of goods or sounds provided that such signs are capable of:

- (a) distinguishing the goods or services of one undertaking from those of the other undertaking; and
- (b) being represented in the register in a manner which enables the competent authorities and the public to determine the clear and precise subject matter of the protection afforded to its proprietor.

According to the above, trademark protection can be granted in the European Union through registration for a sign that is (a) distinctive in nature and thus, capable of performing the core functions of a trademark that are identifying the source or origin,

¹³¹ Directive (EU) 2015/2436 of the European Parliament and of the Council of 16 December, 2015 to approximate the laws of the Member States relating to trade marks, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32015L2436>

¹³² Regulation (EU) 2015/2424 of the European Parliament and of the Council of 16 December 2015 amending Council Regulation (EC) No. 207/2009 on the Community trade mark and Commission Regulation (EC) No 2868/95, implementing Council Regulation (EC) No 40/94 on the Community trade mark and repealing Commission Regulation (EC) No 2869/96 on the fees payable to the Office for Harmonisation in the Internal Market, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32015R2424>

¹³³ Regulation (EU) 2017/1001 of the European Parliament and of the Council of 14 June 2017 on the European Union trade mark, <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32017R1001>

and distinguishing the product in the market from the competing alternative, and that (b) can be presented in a clear and precise manner that guarantees clarity and reliability for the trademark holder and competition on what is the legally protected subject matter. Directive 2015/2436 provides more details by stating that representation of a sign eligible for registration must be done in an appropriate manner, not necessarily in a graphical format, by using generally available technology, and that the representation should be ‘...self-contained, easily accessible, intelligible, durable and objective (Sieckmann criteria).’¹³⁴

In addition to these positive pre-conditions set on distinctiveness and representation of the protectable subject matter, the absolute grounds of refusal defined in the Article 4 of Trademark Directive 2015/2436 and Article 7 of European Trademark Regulation 2017/1001 outline the situations in which trademark protection cannot be granted. In case a sign fails to fulfill the requirement for registration based on the absolute grounds of refusal relating to lacking inherent distinctiveness, becoming customary or being generally descriptive in nature, the mark may be registered, if it has acquired distinctiveness in the relevant market ‘following the use which has been made of it’, and this can be proven with adequate evidence.¹³⁵

The following section discusses the registration requirements set on trademarks in European Union from the perspective of scent marks and aims to understand how and to what extent smell marks fulfill the pre-conditions set on distinctive character and representation to qualify for successful registration in the region.

3.4.1 Distinctive character of scent marks

According to Trademark Directive 2015/2436, Trademark Regulation 2015/2424 and European Trademark Regulation 2017/1001, the first requirement for trademark registration is that an eligible sign must be inherently distinctive, and able to differentiate the goods offered by a company from those offered by its competition. This ability of a sign to individualize a product and fulfill the requirement of distinctiveness can be confirmed by testing the sign with an average consumer, who as a reasonably well-

¹³⁴ Directive (EU) 2015/2436 of the European Parliament and of the Council of 16 December, 2015 to approximate the laws of the Member States relating to trade marks, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32015L2436>

¹³⁵ Max Planck Institute for Intellectual Property and Competition Law, ‘Study on the Overall Functioning of the European Trade Mark System, 15.2.2011, <https://op.europa.eu/en/publication-detail/-/publication/5f878564-9b8d-4624-ba68-72531215967e>

informed, observant and circumspect actor, must be able to differentiate the products based on the mark from alternatives without a likelihood of confusion.¹³⁶ If a sign lacks distinctive character, and it ‘does not reliably indicate the commercial source of a product’, registration cannot be accepted based on the absolute grounds of refusal based on Article 4 in Trademark Directive 2015/2436 and corresponding Article 7 of European Trademark Regulation 2017/1001.¹³⁷

By definition, a trademark is distinctive a sign that is attached to a product and forms a link between the sign and the product, but the sign itself should not constitute or be a part of the product itself to qualify as a trademark.¹³⁸ The challenge with non-traditional trademarks, such as scents, is that they are often an integral part of the product, characteristic or technical feature of it. As stated by Irene Calboli in a webinar on the protection of non-traditional trademarks – critical perspectives published by European Union Intellectual Protection Office (EUIPO), a scent sign can only fulfil the distinctiveness requirements, if a smell is attached to a product that originally would be unscented, or in case the smell is unique from the natural scent of a product, making these goods to stand out from the competing alternatives and in the surroundings.¹³⁹ Thus, only a scent sign that is independent from a product to which it is assigned, that is not a part of a product itself or that is assessed to be unique as combination of a scent and product can fulfill the requirement of distinctiveness. As argued by Karapapa, even if a scent must not show originality as such, a scent must demonstrate a unique character -that is be inherently distinctive - in respect to the product and product category in question to act as a trademark.¹⁴⁰ As distinctiveness is created in the connection built between a scent, and a product that is recognized by consumers, a particular scent may

¹³⁶ Kumar Abhijeet, Protecting Smell Marks: Breaking Conventionality, *Journal of Intellectual Property Rights*, Vol 21, p 129-139, May 2016,

<http://nopr.niscair.res.in/bitstream/123456789/34726/1/JIPR%2021%283%29%20129-139.pdf>

¹³⁷ Shambarta Marilena, Can non-traditional signs, such as colours, scents and sounds be protected under Trademark Law? If not, what are the alternatives to do so?,

http://mslawyers.eu/images/publication_documents/Can_non-traditional_signs,_such_as_colours,_scents_and_sounds_be_protected_under_Trade_Mark_Law.pdf

¹³⁸ Calboli Irene, Senfleben Martin, *the Protection of Non-traditional trademarks, critical perspectives*, Oxford University Press, 2018, p2

¹³⁹ Webinar on ‘The Protection of Non-Traditional Trademarks: Critical Perspectives’, European Union Intellectual Property Office (EUIPO), presentation by Calboli Irene, Senfleben Martin R.F, published on 7.3.2019, <https://euipo.europa.eu/knowledge/course/view.php?id=3511#section-0>

¹⁴⁰ Karapapa Stavroula, Registering scents as community trademark, *The Trademark Reporter*, 100(6), pp 1335-1359, https://www.researchgate.net/publication/322702550_Registering_scents_as_community_trade_marks

be assessed to be distinctive in relation to a certain product, while in case of another category, the smell may fail to act as a trademark.¹⁴¹

The limitations set in the absolute ground of refusal in Trademark Directive 2015/2436 and European Trademark Regulation 2017/1001 aim to ensure that granting an exclusive right on a sign has limited impact on the market dynamic and competition. If a characteristic, such as a specific scent is a common feature in different products in a certain product category, it cannot be distinctive. If such a common and natural feature of a product, even if not critical from product functionality point of view, could be registered as a trademark, a strong monopoly could be formed that could be renewed in practice for eternity. If product features that are essential for the functioning of a product were allowed to constitute a trademark, competition may be seriously hampered as competing alternatives may not use this feature due to the exclusive right granted to the trademark holder. Registering this type of product characteristic as a trademark for example in case of a new product launch would negatively impact competitors' possibilities to bring product with similar features to the market. Further, if trademark protection is granted for a characteristic of a product itself without deeper evaluation, the purpose and effect of other intellectual property rights can be potentially undermined and overlapping rights may be granted with patents, industrial design, and copyright law that aim to protect innovation and creative works, respectively.

The European courts have argued in the opinions rejecting scent mark registrations that consumers do not see non-traditional elements as marks and do not acknowledge the link between e.g. a scent and a product in question, and consequently this type of marks cannot be protected as trademarks.¹⁴² Non-traditional trademarks are seen to lack distinctiveness, if an average consumer, who is reasonably well-informed, observant and circumspect, does not recognize and comprehend them as trademarks.¹⁴³ If this argument is based on the assumption that consumers have not yet learnt and acknowledge that non-traditional signs may indicate the source of the goods, this will be

¹⁴¹ Karapapa Stavroula, Registering scents as community trademark, *The Trademark Reporter*, 100(6), pp 1335-1359, https://www.researchgate.net/publication/322702550_Registering_scents_as_community_trade_marks

¹⁴² Webinar on 'The Protection of Non-Traditional Trademarks: Critical Perspectives', European Union Intellectual Property Office (EUIPO), presentation by Calboli Irene, Senfleben Martin R.F, published on 7.3.2019, <https://euipo.europa.eu/knowledge/course/view.php?id=3511#section-0>

¹⁴³ Kumar Abhijeet, Protecting Smell Marks: Breaking Conventionality, *Journal of Intellectual Property Rights*, Vol 21, p 129-139, May 2016, <http://nopr.niscair.res.in/bitstream/123456789/34726/1/JIPR%2021%283%29%20129-139.pdf>

overcome gradually as this type of trademarks become more popular, are more used in marketing and brand building, and consequently become familiar for consumers.

3.4.2 Acquired distinctiveness of scent marks

In addition to the above presented, so-called inherent distinctiveness of a sign, that meets the registration requirements, a sign may acquire distinctiveness through its application in the business and use in connection with a certain product, even if the sign itself in its original format lacks distinctiveness and would be declined based on the absolute grounds of refusal in the European trademark legislation. Acquired distinctiveness, thus, refers to a phenomenon, where a mark is not inherently distinctive, but it gradually becomes such through use.¹⁴⁴ Both Trademark Directive 2015/2436 and European Trademark Regulation 2017/1001 state in the articles covering absolute grounds of refusal the exception granted for signs that can be shown to have acquired distinctiveness through use. Trademark Directive 2015/2436 stipulates in the Article 4 (4) as follows:

‘A trade mark shall not be refused registration in accordance with paragraph 1(b), (c) or (d), if before the date of application for registration, following the use which has been made of it, it has acquired a distinctive character.’

The same regulation is formulated in the European Trademark Regulation 2017/1001 as follows:

‘Paragraph 1(b), (c) and (d) shall not apply if the trade mark has become distinctive in relation to the goods or services for which registration is requested as a consequence of the use which has been made of it.’

When systematically and regularly used in combination with a product, a scent may establish a position in consumers’ minds that tightly, reliably and in a permanent manner connects the scent in question with a specific product brand. The very essence of a trademark as an intellectual property is in its ability to form this relationship between the product and the scent to indicate the origin. The exclusive right achieved through trademark registration aims at protecting this formed connection and value

¹⁴⁴ Shambarta Marilena, Can non-traditional signs, such as colours, scents and sounds be protected under Trade Mark Law? If not, what are the alternatives to do so? A comparative analysis between Europe and United States of America, http://mslawyers.eu/images/publication_documents/Can_non-traditional_signs,_such_as_colours,_scents_and_sounds_be_protected_under_Trade_Mark_Law.pdf

generated by it, not what could be called the trademarked sign itself or its own intrinsic value.¹⁴⁵ Like in case of other eligible signs, it is possible that a scent develops or acquires distinctiveness through use, and it becomes so strong that consumers recognize the scent as indicating the source of the goods, and thus, could be protected based on this argumentation.¹⁴⁶

In order to gain protection under acquired distinctiveness, evidence needs to be shown that a sign has collected adequate amount of goodwill amongst the target audience. The previous legal practice in relation to the European Trademark shows that proof of acquired distinctiveness is require from all members states in order to determine that a sign has acquired distinctiveness through use. This is a rather stringent requirement considering the business reality. In case of *Lindt & Sprungli v. OHIM*, relating to protecting a 3D shape sign based on acquired distinctiveness, the European Court of Justice stated as a part of its reasoning that ‘the acquisition by a mark of distinctive character through use must be proved for the part of the European Union in which that mark...had such character, it would be unreasonable to require proof of such acquisition for each member state’, indicating a more flexible approach to defining the market in which the acquisition of distinctiveness should be taken.¹⁴⁷

3.4.3 Representation of scent marks

The abolishment of graphical representation requirement in the trademark reform of 2017 opened the possibility to register non-traditional, and particularly non-visual signs as trademarks in the European Union. Even if the graphical representation of a sign in a visual form is no longer a pre-condition for trademark registration, olfactory signs, like other signs, must satisfy the requirements outlined in the famous *Sieckmann* case ruling by European Court of Justice and which were later on included into Trademark Directive 2015/2436, in order to qualify for trademark registration.¹⁴⁸ The *Sieckmann* criteria states that a sign should be ‘clear, precise, self-contained, easily accessible, intelligible, durable and objective’ to be registrable. The term ‘self-contained’ means that a sign must

¹⁴⁵ Kumar Abhijeet, Protecting Smell Marks: Breaking Conventionality, *Journal of Intellectual Property Rights*, Vol 21, p 129-139, May 2016,

<http://nopr.niscair.res.in/bitstream/123456789/34726/1/JIPR%2021%283%29%20129-139.pdf>

¹⁴⁶ Karapapa Stavroula, Registering scents as community trademark, *The Trademark Reporter*, 100(6), pp 1335-1359, https://www.researchgate.net/publication/322702550_Registering_scents_as_community_trade_marks

¹⁴⁷ European Court of Justice, Judgement on 24.5.2012, C-98/11, *Chocoladefabriken Lidt & Sprungli Ab v. OHIM*, <https://ipcuria.eu/case?reference=C-98/11>

¹⁴⁸ European Court of Justice, Judgement on 12.12.2022, C-273/00, *Ralf Sieckann v. Deutsches Patent und Markenamt*, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:62000CJ0273&from=EN>

be well defined and complete in its form and ‘easily accessible’ translates to possibility of forming an official trademark register that includes all registered signs regardless of their forms and through which relevant parties can get information and inspect the registered signs. The representation should be ‘intelligible’ in such a way that a competent authority, competitors, and general public can conclude on the subject matter of protection clearly and precisely. This requires consequently that the sign is ‘durable’ and does not deteriorate over time and can be objectively defined and scoped in relation to other signs. The main argument for not granting trademark protection for scents so far has been that smells cannot be specified precisely, stored in a durable manner, and are perceived differently by different persons. Thus, in case of smells, the claim has been that the subject matter of protection cannot be described with adequate precision.

As can be seen from the past applications attempting to register scents as a trademark, scents are often described by using words. The main reasoning against using verbal description of a scent in representation is that words are not objective, but can be understood in various ways, and have different meaning depending on the person, indicating that they are not clear and precise enough. On the other side, chemical formula represents the compound itself and does to describe or identify the scent that is coming from the compound.¹⁴⁹ The proposal of physically storing samples of scents is challenged as the scent samples deteriorate and modify over time, and further, access to such samples is complicated and burdensome to arrange.¹⁵⁰ The strength and intensity of scents are impacted by temperature, humidity, and air circulation.¹⁵¹ Based on what has been so far known and available in terms identifying, storing and reproducing scents, it is demanding, if not impossible to individualize scents reliably, and in an objective format by using the traditionally used methods of representing a sign.

In addition to being both intelligible and intuitive, representation should be free from any element of ‘subjectivity’, thus, objective. Human beings perceive signs through senses of sight, touch, taste, smell, or hearing, but the perception of a single sign or

¹⁴⁹ Friedman Danny, EU opened door for sound marks, will scents follow?, *Journal of Intellectual Property Law and Practice*, Oxford University Press, December 2015, p931-939, <https://www.researchgate.net/publication/284564005>

¹⁵⁰ Friedman Danny, EU opened door for sound marks, will scents follow?, *Journal of Intellectual Property Law and Practice*, Oxford University Press, December 2015, p931-939, <https://www.researchgate.net/publication/284564005>

¹⁵¹ Mishra Neha, ‘Registration of non-traditional trademarks’, National Law School of India University, November 2007, https://www.researchgate.net/publication/298463513_Registration_of_non-traditional_trademarks

combination of them differs from person to person. Our perception of the same smell differs due to our individual and unique sense of smell that varies based on our physiology, past experiences, expectations, motives, and cultural background. As stated earlier, scents do not exist in isolation, but are impacted by the surrounding circumstances and connected to our memories and depend on our individual and personal abilities to detect and recognize scents and form connections between scents and products.¹⁵² The argument that sensory based signs such as scents and tastes are subjective, and 'a moving target' that cannot be perceived in the same manner or represented objective has been used to decline the eligibility of scents for registration under the European legislation.¹⁵³

Based on the above discussed challenges, scent mark appropriators struggle to register their marks in the European Union despite the removal of the graphical representation from the requirements of trademark registration in the region. This is mainly due to the representation challenges caused by the fluid, non-visual and intangible nature of the signs that make it difficult to identify, store and reproduce this type of signs. It has been argued that while the current prevailing legislation would allow registration of scent marks, the courts in the European Union are lacking the courage and will to acknowledge the emerge of the nontraditional signs and are not taking actions to interpret the prevailing regulations in a manner allowing registration of scent marks.¹⁵⁴ This criticism may be pushed back with the argumentation that currently known and traditionally used methods of representing a sign through written description, samples or lists of compounds are not adequate for specifying and detailing a scent sign in a manner that would satisfy the requirements set for registration.

¹⁵² Mishra Neha, 'Registration of non-traditional trademarks', National Law School of India University, November 2007, https://www.researchgate.net/publication/298463513_Registration_of_non-traditional_trademarks

¹⁵³ Mishra Neha, 'Registration of non-traditional trademarks', National Law School of India University, November 2007, https://www.researchgate.net/publication/298463513_Registration_of_non-traditional_trademarks

¹⁵⁴ Wolangiewicz, How, it at all, should the law of trademarks adapt to the rise of sensory marketing?, *Wroclaw Review of Law, Administration & Economics*, 7(2), p40-57, December 2018, https://www.researchgate.net/publication/329343664_How_if_at_All_should_the_Law_of_Trademarks_Adapt_to_the_Rise_of_Sensory_Marketing

4 SCENT TECHNOLOGIES: SOLUTIONS TO IDENTIFY, STORE AND REPRODUCE SCENT

4.1 Introduction to scent technologies in general

After removal of the graphic representation requirement in the European Union, Trademark Directive 2015/2436 states that a sign may be represented in any appropriate form using generally available technology, when presented for registration. The formulation is technology neutral as long as the provided solution assists in satisfying the fore mentioned Sieckmann criteria set on representation. The wording of the legislation remains open for new innovations in the field of scent detection, storing and reproduction, and clearly prepares and anticipates such solutions to emerge in the market in the coming years. In the preparatory works of the Trademark Directive 2015/2436 and Regulation 2015/2424, it was proposed that ‘freely available technology’ should be used to describe the ambition state, but the wording finally settled to ‘generally available technology’, indicating that the solution should be affordable. The national trademark offices are given the freedom to test and trial different methods to register and store scent marks, while the challenge prevails to define what is the harmonized and accepted method on the European Union level, if any, in the future.

In line with the expectation signaled in the formulation of the Trademark Directive 2015/2436, over the last years technology has reached the maturity level, where smells can be digitally translated into a code, stored in a digital format, downloaded, and recreated by transforming the digital file into a scent. Technological advancements are providing new methodologies and tools to analyze, specify, recognize, and store scents, but as well enable re-emittance and recreation of scents. Development has brought to the market solutions, such as digital scent applications, e-nose, scent domes and printers that may enable fulfillment of the previously mentioned representation requirements in an effective manner.¹⁵⁵ The question remains will these technological advancements enable overcoming the previously presented challenges in scent mark registration, to what extent and when.

While marketers have been creating exciting user experiences in the past by appealing to senses of sight and hear, the advancing development of virtual reality allows building an even more close-to-the-reality experiences for the users and does this by addressing all

¹⁵⁵ Friedman Danny, EU opened door for sound marks, will scents follow?, *Journal of Intellectual Property Law and Practice*, Oxford University Press, December 2015, p931-939, <https://www.researchgate.net/publication/284564005>

senses and particularly touch, taste, and scent in producing a 360-degree experience.¹⁵⁶ Digital scent technology aims to digitally identify, sense, code, transmit, reproduce and control scents. It is one of the concepts linked to virtual reality that facilitates and improves the human – computer interaction, where hardware is producing the smell according to the receipt controlled by a software.¹⁵⁷ As stated by John T Cross in his research paper examining digital scents, ‘digitalization of odors has significant potential as this technology will allow scents to be stored without degradation and transmitted over long distances... without a physical object’.¹⁵⁸ According to him a scent may potentially become a product on its own in the future as it is separated from the product.

Scent technologies have naturally significant business potential particularly in such areas as entertainment, communication, on-line shopping, but as well in enabling trademark registration. Several computerized olfactory solutions, including devices and applications to code and compress odors into a digital format have been created by scent technology innovators during the last years, but so far none of the solution have become a market success, but at the same time promising advancements have been made.¹⁵⁹ Next section explores these latest developments in scent technology potentially allowing fulfillment of the Sieckmann criteria.

4.1.1 Technological solutions to recognize and identify scents

One of the technological solutions to identify scents in a clear and precise manner is to analyze compounds of a scent through a gas chromatography or mass spectrometry analysis. In this process, a scent is assessed with a gas chromatography or mass

¹⁵⁶ Parashar Neeraj Kumar, Kumar Navneet, A Concept Of Digital Scent/Smell Technology: An Unrated Technology, International Journal on Recent and Innovation Trends in Computing and Communication, Volume 5, Issue 11, https://www.academia.edu/36852668/A_Concept_of_Digital_Scent_Smell_Technology_An_Underrated_Technology

¹⁵⁷ Viswanathan Sorna Mugi, Rajan Revath, Digital Scent Technology – a Critical Overview, International Journal of Trend in Scientific Research and Development (IJTSRD), Volume 4, Issue 4, June 2020, <https://www.ijtsrd.com/engineering/electronics-and-communication-engineering/30920/digital-scent-technology-a-critical-overview/sorna-mugi-viswanathan>

¹⁵⁸ Cross John T, Trademark issues related to digitalised flavour, Yale Journal of Law and Technology, Volume 19/2017, Issue 1, <https://digitalcommons.law.yale.edu/cgi/viewcontent.cgi?article=1132&context=yjolt>

¹⁵⁹ Jain Sudhanshu, Bhargava Deepshikha, Poonia Ramesh Chandra, Kumar B Suresh, Role of web enabled Digital Scent Technology, International Journal of Converging Technologies and Management (IJCTM), Volume 1, Issue 1, 2015, http://www.gyanvihar.org/researchjournals/CTM_VOL_1_7.pdf#:~:text=With%20the%20digital%20scen t%20technology%20we%20are%20capable,characters%20and%20gives%20an%20emotional%20intelligence%20of%20reality

spectrometry that separates constituents in a gas, identifies different compounds and their masses and produces a description of the composition of a scent based on the particles locked into a sample.¹⁶⁰ Until today, the process has not been proven to be accurate enough due to the challenges in identifying chemicals with low concentrations or odorless compounds giving false readings.¹⁶¹ However, if the accuracy and preciseness of the measurement can be developed further, this solution could be used to identify scents in a precise and accurate manner. When combined with a mass spectrometry, a gas chromatography leads to more reliable results with higher level of accuracy in detailing the chemical compounds and their concentrations in a sample.¹⁶² As the equipment itself is relatively expensive, the European Union Intellectual Property Office or the national intellectual property actors could establish a service to measure and store the samples in a publicly available database. The challenge with gas chromatography and mass spectrometry measurements is, however, that they are intelligible or immediately understandable for only a limited number of persons with professional training and education in the field.

An electronic nose, or so-called e-nose is a device that uses sensors to detect and separate complex scents and odors from the surroundings. Electronic nose as a receiver of the scent signal has chemical sensors that react to smells, and as different scents form varying patterns, they are compared to each other with the aid of a scent spectrum similar to already known color spectrums and used to specify particular scents through indexing them against and along the spectrum.¹⁶³ The artificial e-nose is built on the same principle as the human nose, namely each sensor senses multiple scents, and the pattern of which sensors respond to which smell is a unique composition of sensors. A more advanced version of an e-nose, so-called colorimetric electronic nose, tracks color changes in gas-based sensors, and produces a unique color identity card for the smell under measurement that is deemed to be a highly accurate and precise.¹⁶⁴ Based on this

¹⁶⁰ Friedman Danny, EU opened door for sound marks, will scents follow?, *Journal of Intellectual Property Law and Practice*, Oxford University Press, December 2015, p931-939, <https://www.researchgate.net/publication/284564005>

¹⁶¹ Karapapa Stavroula, Registering scents as community trademark, *The Trademark Reporter*, 100(6), pp 1335-1359, https://www.researchgate.net/publication/322702550_Registering_scents_as_community_trade_marks

¹⁶² Karapapa Stavroula, Registering scents as community trademark, *The Trademark Reporter*, 100(6), pp 1335-1359, https://www.researchgate.net/publication/322702550_Registering_scents_as_community_trade_marks

¹⁶³ Parashar Neeraj Kumar, Navneet, A Concept Of Digital Scent/Smell Technology: An Unrated Technology, *International Journal on Recent and Innovation Trends in Computing and Communication*, Volume 5, Issue 11, https://www.academia.edu/36852668/A_Concept_of_Digital_Scent_Smell_Technology_An_Underrated_Technology

¹⁶⁴ Karapapa Stavroula, Registering scents as community trademark, *The Trademark Reporter*, 100(6), pp 1335-1359, https://www.researchgate.net/publication/322702550_Registering_scents_as_community_trade_marks

outcome, a digital scent can be translated into a code that is later utilized to reproduce the smell.

During the last decade e-sensing that recognizes certain type of smells has been applied to medical and food production and in security. Technological solutions have been used to sense if a food material contains bacteria or has been contaminated. Another application has been to detect, if a patient has developed a cancer by measuring organic elements from the breathing. Security and law enforcement have as well used e-sensing to identify drugs in cargo or and detect bombs. Thus, we have already seen some of the scent detecting solutions in commercial use, while waiting for a scent identification solution to emerge amongst the start-ups that would enable specifying scents in a clear, precise, and objective manner for the purposes of trademark registration.

4.1.2 Technological solutions to reproduce scents

The digital files created of the scents based on gas chromatography, mass spectrometry or e-nose may be re-created by using scent applicators. Applicators, such as e-domes, and scent printers emit compounds that replicate the scent according to the decoded digital file. Another version of the scent emission concept is so called scent synthesizer that as well can be used to translate a digitalized scent file into smells that are dispersed into the environment by using computer aided gadgets.¹⁶⁵ The functioning logic of the mentioned equipment is similar to each other, meaning that an add-on device is typically connected to a personal laptop, and cartridge of smell chemicals is used to reproduce a scent by emitting compounds in the portions indicated on code that contains the scent recipe.¹⁶⁶ In theory, as argued by John T Cross, digitalization of scents or flavors will enable effective and permanent separation of the sign and the product from each other, and allow sending only the sign in a digitalized format to the receiver¹⁶⁷ that may be used to enhance brand experience, but may as well raises questions related to disconnecting the sign and the product, as the sign becomes a product on its own and could be protected

¹⁶⁵ Jain Sudhanshu, Bhargava Deepshikha, Poonia Ramesh Chandra, Kumar B Suresh, Role of web enabled Digital Scent Technology, International Journal of Converging Technologies and Management (IJCTM), Volume 1, Issue 1, 2015, http://www.gyanvihar.org/researchjournals/CTM_VOL_1_7.pdf#:~:text=With%20the%20digital%20scen t%20technology%20we%20are%20capable,characters%20and%20gives%20an%20emotional%20intellig ence%20of%20reality

¹⁶⁶ Karapapa Stavroula, Registering scents as community trademark, The Trademark Reporter, 100(6), pp 1335-1359, https://www.researchgate.net/publication/322702550_Registering_scents_as_community_trade_marks

¹⁶⁷ Cross John T, Trademark issues related to digitalised flavour, Yale Journal of Law and Technology, Volume 19/2017, Issue 1, <https://digitalcommons.law.yale.edu/cgi/viewcontent.cgi?article=1132&context=yjolt>

separately as a creative work or even innovation, if novelty can be shown instead of a trademark.

The development in scent dispersing technology started already in 1950's, when Hans Laube invented a Smell-O-Vision system which released scents during a viewing of a movie and was shortly followed by a competing solution AromaRama provided by Charles Weiss.¹⁶⁸ In 2001, DigiScents Inc. brought to the market a product iSmell, a scent synthesizer that reproduced scents by using a software called ScentStream and connected an USB appliance with a cartridge to a PC. It was claimed to have the capability to produce 128 essential scents and replicate more than 10 000 different smells.¹⁶⁹ As a pioneer of the field, it has been followed by number of other innovators that have failed in commercial launch like DigiScent.¹⁷⁰ The development has not, however, stopped but intensified during the last decades. In 2005, TriSenx launched its scent-dome, a system enabling websites to emit scents.¹⁷¹ They were followed by NTT Communications, who launched Aroma Geur that was used to create, send and receive first e-mails with scent content in 2007.¹⁷² In 2014, Harvard University announced that they have developed a technological solution called DUO consisting of a mobile phone and application that contains 32 different kind of basic scent compounds and has the

¹⁶⁸ Parashar Neeraj Kumar, Kumar Navneet, A Concept of Digital Scent/Smell Technology: An Unrated Technology, International Journal on Recent and Innovation Trends in Computing and Communication, Volume 5, Issue 11, https://www.academia.edu/36852668/A_Concept_of_Digital_Scent_Smell_Technology_An_Underrated_Technology

¹⁶⁹ Salonek Tommy, History's Worst 15 Named Tech Products, 6.3.2014, <https://www.intertech.com/15-worst-named-tech-products/#:~:text=The%20DigiScent%20iSmell%20has%20gone%20down%20as%20one,but%20we%E2%80%99ll%20certainly%20admit%20that%20the%20name%20stunk>

¹⁷⁰ Jain Sudhanshu, Bhargava Deepshikha, Poonia Ramesh Chandra, Kumar B Suresh, Role of web enabled Digital Scent Technology, International Journal of Converging Technologies and Management (IJCTM), Volume 1, Issue 1, 2015, http://www.gyanvihar.org/researchjournals/CTM_VOL_1_7.pdf#:~:text=With%20the%20digital%20scent%20technology%20we%20are%20capable,characters%20and%20gives%20an%20emotional%20intelligence%20of%20reality

¹⁷¹ Gosain Devashish, Sajwan Mohit, 'Aroma tells a Thousand Pictures: Digital Scent Technology a New Chapter in IT Industry', International Journal of Current Engineering and Technology, Vol 4, No. 4, August 2014, https://www.researchgate.net/publication/281285713_Aroma_Tells_a_Thousand_Pictures_Digital_Scent_Technology_a_New_Chapter_in_IT_Industry

¹⁷² Gosain Devashish, Sajwan Mohit, 'Aroma tells a Thousand Pictures: Digital Scent Technology a New Chapter in IT Industry', International Journal of Current Engineering and Technology, Vol 4, No. 4, August 2014, https://www.researchgate.net/publication/281285713_Aroma_Tells_a_Thousand_Pictures_Digital_Scent_Technology_a_New_Chapter_in_IT_Industry

capability to create more than 300 000 scents. Patent has been as well sought in Germany for a mobile phone able to send and receive smell messages.¹⁷³

Even if scent dispensers have been around since 1950's, only recently the development has reached a level, where these solutions could be effectively used in the marketplace and put into commercial use.¹⁷⁴ Considering how quickly the technological steps have progressed to create high quality digital video and sound records and revolutionized the distribution of films and records, it can be expected that the spectrum and quality of scent applicators will be developing swiftly in the coming decades, and these solutions will become a part of our daily lives.

4.1.3 Technological solutions to categorize and store scents

Creation of an internationally recognized and approved smell classification system in line with the Vienna Convention for figurative elements of marks is one of the pre-conditions that would enable registration of non-traditional trademarks in Europe.¹⁷⁵ In case of color signs, the Pantone or RAL classification systems, which are based on measurement of the wavelength of light, provide a framework for identifying and distinguishing different colors, and similar should be developed for scents. Scientists have tried to create a unified odor system to identify and categorize smells reliably that would be required to structure scents in a smell database, and to define the protectable subject matter objectively from trademark protection point of view. As one of the forerunners in the field, Maurice Chastrette has presented in his research that scents can be categorized a) empirically based on the feelings and experiences they create, b) based on primary odors, referring to limited number of base odors, or c) by using a statistical methods on a large scent datasets to find commonalities to create categories.¹⁷⁶ However, until today,

¹⁷³ Gosain Devashish, Sajwan Mohit, 'Aroma tells a Thousand Pictures: Digital Scent Technology a New Chapter in IT Industry', International Journal of Current Engineering and Technology, Vol 4, No. 4, August 2014,

https://www.researchgate.net/publication/281285713_Aroma_Tells_a_Thousand_Pictures_Digital_Scent_Technology_a_New_Chapter_in_IT_Industry

¹⁷⁴ Kooser Amanda, 'Japanese scientists create Smell-O-Vision-screen, C-net, 2.4.2013, <https://www.cnet.com/news/japanese-scientists-create-smell-o-vision-screen/>

¹⁷⁵ World Intellectual Property Office (WIPO), International Classification of the Figurative Elements of Marks under the Vienna Convention, 12.6. 1973, 7th edition, <https://www.wipo.int/classifications/nivilo/pdf/eng/vienna/vie7eng.pdf>

¹⁷⁶ Gosain Devashish, Sajwan Mohit, 'Aroma tells a Thousand Pictures: Digital Scent Technology a New Chapter in IT Industry', International Journal of Current Engineering and Technology, Vol 4, No. 4, August 2014, https://www.researchgate.net/publication/281285713_Aroma_Tells_a_Thousand_Pictures_Digital_Scent_Technology_a_New_Chapter_in_IT_Industry

research has not been able to identify the primary scents, but indicated that the amount of primary odors could be even 100 or above.¹⁷⁷ Further, smells seem not to be orthogonal, meaning a scent cannot be created by mixing two or more smells together, like in case of colors.¹⁷⁸ If scientists succeed in solving the scent classification challenge, this will open up a possibility to define odors by referencing them to an accepted standard of classification for smells. This solution should be a global system instead of a national approach to guarantee reliability, and secure efficiency.

4.2 Digital scent technology implication on scent mark registration

Technological development is on the route to offer solutions that will enable digitalization of olfactory information and reproduction of scents based on the coded data.¹⁷⁹ Despite the prevailing shortcomings and failed attempt to launch scent solutions, the advancements can be expected to overcome the challenges on representing scent marks in a clear, precise, self-contained, durable, intelligible, and objective manner in the coming years.

Based on the previously presented solutions, identification of scents and specifying them in a precise, clear, and objective manner will be delivered through technologies that will analyze and split a smell into compounds, describe it digitally and allow comparison against scent spectrum and other registered smells. The requirement on self-containment can be satisfied through an encoded digital scent that is stored and transferred as a file and further re-created matching the original smell through a technological solution that emits scent components according to the instruction. This digital chain will ensure that the original scent has a 'scent recipe' that can be exactly replicated and reproduced in the end of the process. Further, as digitally encoded scents

¹⁷⁷ Gosain Devashish, Sajwan Mohit, 'Aroma tells a Thousand Pictures: Digital Scent Technology a New Chapter in IT Industry', *International Journal of Current Engineering and Technology*, Vol 4, No. 4, August 2014,

https://www.researchgate.net/publication/281285713_Aroma_Tells_a_Thousand_Pictures_Digital_Scent_Technology_a_New_Chapter_in_IT_Industry

¹⁷⁸ Gosain Devashish, Sajwan Mohit, 'Aroma tells a Thousand Pictures: Digital Scent Technology a New Chapter in IT Industry', *International Journal of Current Engineering and Technology*, Vol 4, No. 4, August 2014,

https://www.researchgate.net/publication/281285713_Aroma_Tells_a_Thousand_Pictures_Digital_Scent_Technology_a_New_Chapter_in_IT_Industry

¹⁷⁹ Gosain Devashish, Sajwan Mohit, 'Aroma tells a Thousand Pictures: Digital Scent Technology a New Chapter in IT Industry', *International Journal of Current Engineering and Technology*, Vol 4, No. 4, August 2014,

https://www.researchgate.net/publication/281285713_Aroma_Tells_a_Thousand_Pictures_Digital_Scent_Technology_a_New_Chapter_in_IT_Industry

are not impacted by the surrounding circumstances, e.g. temperature or humidity, and they do not evaporate over time in storage, satisfying the durability and stability requirement set on the representation becomes feasible. The registered representation of scent marks needs to be easily accessible, and understandable for the public and relevant authorities. The earlier proposed scent database and scent spectrum, similar to color classification, is a pre-condition and starting point, but not adequate alone to meet the requirement. It needs to be complemented with devices that provide a possibility for relevant parties to check scent registrations in their real form as smells, that is the protectable subject matter, easily and accurately. Even if the cost of scent technologies is still today high, the cost of such devices will become more affordable, and availability improved as has happened after a while to any new technology introduced to the market.

In addition to parallel drawn earlier to colors in terms of classification system, the proposed technological solutions to represent scents are similar to those used to identify, store and reproduce sounds. Sound marks are represented through notes that allows manual storing and replication of the sound, but a sample of the tone can be as well provided and created digitally to present and store the sign in a nonvisual format. As digital files on sound marks are accepted in the European Union and meet the representation requirement, this same principle should be applicable on scent marks as soon as smells may be represented digitally and recreated with certainty. Scents can in the future and already with current technologies be described digitally and reproduced based on the scent code. Considering that musical notes, which are comprehensible and readable only by individuals trained on music, are permitted as a representation of a sound mark in the registration process, similarly it can be argued that a scent code, which is produced based on the measurement and provides a recipe of the scent should be accepted as a possible representation of a scent mark in the spirit of equal and fair treatment of different mark types.

In summary, as soon as an adequate level of maturity is achieved on scent technologies, representation challenges on scent signs will be overcome and registration of smell marks as trademarks becomes feasible in the European Union. Even if scent technologies are not yet without problems, they have potential to provide solutions that will enable fulfillment of the Sieckmann criteria based on the assessment of already available technological solutions in the market. While research is advancing, it is difficult to predict when the scent technology solutions are mature and developed enough to justify commercial and legal usage. We are still in search of the universal solutions to individualize, store and replicate scents and selection of the standard platforms to be used in these processes is open. Particularly the level of reliability and accuracy of the technological solutions specifying the scents need to be addressed and solved. The key to this is the ability to identify the primary scents that would form the basis for scent classification system and precise and accurate specification of scents.¹⁸⁰ Having said all this, strong basis exists to develop and provide a set of scent technological solution that will enable meeting the representation requirements set in the European Union for the scent mark registration.

¹⁸⁰ Jain Sudhanshu, Bhargava Deepshikha, Poonia Ramesh Chandra, Kumar B Suresh, Role of web enabled Digital Scent Technology, International Journal of Converging Technologies and Management (IJCTM), Volume 1, Issue 1, 2015, http://www.gyanvihar.org/researchjournals/CTM_VOL_1_7.pdf#:~:text=With%20the%20digital%20scen t%20technology%20we%20are%20capable,characters%20and%20gives%20an%20emotional%20intelligence%20of%20reality

5 EUROPEAN LANDMARK CASES: WHAT IF?

Due to the past requirement of graphical representation, the amount of registered scent trademarks has been limited in the European Union. Prior to the famous Sieckmann – case of 2002 that can be considered the most significant landmark case from scent mark registration point of view, UK Intellectual Property Office, and Benelux Trade Mark Office registered a strong smell of beer for darts, and smell of fresh cut grass for tennis balls, respectively. These were more of exceptional, national cases than an opening of significant amount of scent mark registrations on the European level. We have not seen either a significant number of scent mark application or registrations under national trademark systems in Europe, nor in case of European Trademark regime after the reform that was implemented in 2017. As of today, the earlier mentioned trademark on strong smell of beer applied on a darts brand by Unicorn Products is the only scent mark registration valid in Europe, excluding such countries as Russia and Albania.

Even if most of the following landmark cases in Europe date back to the time prior to the trademark reform of 2017, they provide perspectives and an opportunity to evaluate what are the possibilities to seek for trademark registration for scent marks if the earlier presented technological developments are available, and the cases would come on the table of the registering party or in front of the court today.

5.1.1 *Sieckmann v Deutsches Patent- and Markenamt (C-273/00)*

The most famous and impactful European law case on the scent mark protection is the Sieckmann vs. Deutsches Patent- and Markenamt (C-273/00) of Germany that has had a profound influence on the scent mark registrability in the European Union and continues to influence the future of scent marks in this region.¹⁸¹

In this legal battle, the applicant, Sieckmann, tried to register a smell sign as a trademark through a national registration system in Germany. He stated that the scent sign was ‘pure chemical substance of methyl cinnamate’, included a structural formula of ‘C₆H₅-CH=CHCOOCH₃’ into the application and submitted samples of the smell while describing it in words as ‘balsamically fruity with a slight hint of cinnamon’. Thus, the applicant provided a chemical formula, written description, and sample of the scent as a part of the application. The application was declined by the German Patent and

¹⁸¹ European Court of Justice, Judgment of the Court, C-273/00, dated 12.12.2002, page 7, <http://curia.europa.eu/juris/showPdf.jsf?docid=47585&doclang=EN>

Trademark Office as the sign allegedly was seen to lack distinctiveness and did not satisfy the requirement of graphical representation.

After the appeal by Sieckmann, the German Bunderspatentgericht looked for guidance from the European Court of Justice (ECJ) on the question whether graphical representation requirement is fulfilled, if a scent is represented (a) by a chemical formula, b) by a description, c) by means of a deposit or d) by a combination of these. It further sought to understand if the wording of the previous directive meant that only signs that are capable of being directly represented visually are protectable, or whether signs that can be reproduced to a visible form indirectly based on a visually perceived recipe or instruction were also covered.¹⁸² The appeal court stated that while scents are capable of distinguishing goods and services in theory, the graphical representation requirement could not be satisfied with what applicant had submitted.

The statement from ECJ confirmed the requirement of graphical representation as a precondition for trademark registration that made it impossible to register scent marks in Europe until trademark reform opened the doors for sensory marks. The guidance from the court stated that a trademark may consist of a sign which is not in itself visually perceived, but it must be such that it can be represented graphically.¹⁸³ Even if the requirement for graphical representation was removed in the trademark reform of 2017, the opinion of the Advocate General Ruiz-Jarabo Colomer on the Sieckmann case remains relevant as it highlights the importance of maintaining legal security and solid administration, both of which have been carried to the currently prevailing European legislation. His opinion outlined two criteria for trademark registrations, namely, that a sign must be clear and precise in such a manner that the protectable subject matter is immediately comprehensible and intelligible for those having the interest and need to inspect it.¹⁸⁴ The Advocate General used the words ‘clear, precise, self-contained, easily accessible, intelligible, durable and objective’ in his opinion formulation that was

¹⁸² Friedman Danny, EU opened door for sound marks, will scents follow?, *Journal of Intellectual Property Law and Practice*, Oxford University Press, December 2015, p931-939, <https://www.researchgate.net/publication/284564005>

¹⁸³ Friedman Danny, EU opened door for sound marks, will scents follow?, *Journal of Intellectual Property Law and Practice*, Oxford University Press, December 2015, p931-939, <https://www.researchgate.net/publication/284564005>

¹⁸⁴ Opinion of Advocate General Ruiz-Jarabo Colomer, delivered on November 6, 2001, <https://op.europa.eu/en/publication-detail/-/publication/f97a2c18-1cfc-4a6b-b5e8-3bfc4e94984b>

adopted by the European Court of Justice in their response on C-273/00 as well as later it was included into Trademark Directive 2015/2436.

The ECJ responded to the question of German Bunderspatentgericht that chemical formula does not fulfill the above requirement of being clear and precise enough, or intelligible, meaning that only a few people would be able to connect the formula with the scent in question. Chemical formula can be interpreted only by a limited number of persons with chemistry education, and thus, this would not be a representation that is intelligible for majority of the persons immediately when encountering it.¹⁸⁵ It further continued reasoning that a verbal description, although being graphical, is subject to interpretation, and does not enable replication of the same smell based on it. In a similar fashion, a sample is not stable and durable over time, as scent alters depending on the surrounding conditions and environment, and over time.¹⁸⁶ Based on the wording of the ruling, the court expressed its concerns that the given descriptions were not uncontroversial, and the verbal description, chemical formula or sample were not enough to describe the protectable subject matter with required accuracy and preciseness.¹⁸⁷

What is particularly interesting in the Sieckmann case is that the ECJ explicitly voiced the view that scents are capable of distinguishing goods and services from competing alternatives, indicating that a scent can perform the core function of a trademark. The Sieckmann case outlines the famous requirement for sign representation - that is known as Sieckmann criteria - stating that it must clear, precise, self-contained, easily accessible, intelligible, durable, and objective. Reflecting on the latest developments in the scent technologies, indications are that the emerging solutions will enable us to identify and describe scents that will enable meeting the criteria of clear and precise representation in the future. At the same time, technologies enable us already now to store and reproduce scent marks in a reliable manner. Representation of a protectable subject matter should be easily accessible and intelligible as stated earlier. The previously discussed scent database based on a smell classification system is an essential element that should be in place to allow scent registrations and the system to work in a reliable

¹⁸⁵ Karapapa Stavroula, Registering scents as community trademark, *The Trademark Reporter*, 100(6), pp 1335-1359, https://www.researchgate.net/publication/322702550_Registering_scents_as_community_trade_marks

¹⁸⁶ European Court of Justice, Judgment of the Court, C-273/00, dated 12.12.2002, page 21-22, <http://curia.europa.eu/juris/showPdf.jsf?docid=47585&doclang=EN>

¹⁸⁷ Mishra Neha, Registration of non-traditional trademarks, National Law School of India, Received 27.7.2002, revised 22.11.2007, *Journal of Intellectual Property Rights*, vol 13, January 2008, p43-50, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3147369

and stable manner. However, it may be asked what would constitute intelligible representation in case of scent marks? If sounds can be presented through notes, and colors specified based on Pantone or RAL– references, the assumption is that a measurement produced by a scent measurement appliance would be adequate, if and when it is linked to a generally accepted scent classification.

5.1.2 *Eden SARL v OHIM (T-305/04)*

In the second significant legal case, *Eden SARL vs. Office for Harmonization in the Internal Market (T-305/04)*, the predecessor to European Union Intellectual Property Office (EUIPO), denied Community Trademark registration of a strawberry scent based on the trademark application that covered a variety of products from clothing to washing detergents. Laboratories France Parfum SA included a picture of the actual fruit of strawberry and a verbal description saying ‘the smell of ripe strawberry’ into the submitted application instead of a representation of the smell of a strawberry.¹⁸⁸

The Court of First Instance ruled that a combination of a verbal and figurative element was not clear and precise enough and did not meet the requirement for graphical representation of the scent that was in force in 2005. Further, it was said that textual description does not specify the scent adequately and objectively as ‘different varieties of strawberries produce significantly different smells’, and further, the provided image ‘represents the fruit which emits a smell supposedly identical to the olfactory sign at issue, and not the smell claimed.’ The Court stated that the smell of ripe of strawberries was not distinctive for the goods in question, and further reasoned the rejection stating that there no generally accepted international classification of smells that could be used to sufficiently identify the proposed scent.¹⁸⁹

Argumentation from the Court stating that the scent of a strawberry is not distinctive enough in the context of the proposed product classes highlights the important aspect that even if a scent could be specified and represented, it may lack the ability to act as a trademark, meaning that it does not have the capability of distinguishing products or services from competing alternatives, and does not carry the goodwill that is needed for a sign to convey a message between the brand and the consumer. A scent, such as that of

¹⁸⁸ Judgment of the Court of First Instance (Third Chamber), October 27, 2005 in Case T-305/04, *Eden Sarl V Office for Harmonisation in the Internal Market*, <http://curia.europa.eu/juris/showPdf.jsf?docid=65903&doclang=en>

¹⁸⁹ Kapoor Sanya, Gupta Riya, *The five senses and non-traditional trademarks*, Amity Law School, published 2018, <https://supremoamicus.org/wp-content/uploads/2018/10/V8A26.pdf>

fresh strawberries, can be protected as a trademark, if the connection built between the scent and the product is clear, uncontested, and so strong that the sign is able to distinguish the product in the market in the eyes of an average consumer. Scent mark consists of three different elements; signifier that is a particular scent that acts as a sign, signified that refers to the goodwill created between the scent sign and product, and referent that is the product or service to which the scent mark is connected.¹⁹⁰ In the case of *Eden SARL v. OHIM*, the interconnection between the signifier, signified and referent was not found, and consequently the court concluded that the sign consisting of a fresh strawberry was not distinctive in the given product category, and capable of acting as a trademark. Further argument for declining the application could have been that registration of a generic scent sign of a fresh strawberry for a large spectrum of products, including detergents, would have created a strong monopoly position for the trademark holder that would have impacted the market competition and dynamic negatively.

In this case the Court declined the registration due to lack of graphical representation, while arguing that the verbal description and picture of strawberry were not precise and accurate enough to specify the protectable subject matter and the Court even referred in the opinion statement to the missing smell classification system as a reasoning. Earlier presented technologies will most likely enable us to specify the scent to be registered and protected in a clear and precise manner, and the scent classification system will give us the ability to track and compare scents, even if no commonly agreed methodology and scent spectrum yet exists. However, the new technologies would not most likely change the ruling of this case as the argumentation on lack of distinctiveness, inability to act as a trademark and possible negative market impacts should continue to prevent the registration and cannot overcome with the technological solutions.

5.1.3 *Vennootschap Onder Firma Senta Aromatic (R-156/1998-2)*

Prior to the *Sieckmann* case, the former Trademark Office was challenged in the *Vennootschap onder Firma Senta Aromatic* -case (R-156/1998-2)¹⁹¹ to determine if a scent of a freshly cut grass fulfilled the criteria and could be registered as a trademark for tennis balls for the company based in the Netherlands. According to the prevailing requirement of graphical representation in Community Trademark Regulation (EC) No

¹⁹⁰ Friedman Danny, EU opened door for sound marks, will scents follow?, *Journal of Intellectual Property Law and Practice*, Oxford University Press, December 2015, p931-939, <https://www.researchgate.net/publication/284564005>

¹⁹¹ Decision on the Second Board of Appeal of 11 February 1999 in case of R-156/1998-2, *Vennootschap onder Firma Senta Aromatic*, https://www.copat.de/download/R0156_1998-2.pdf

207/2009 Article 4 at that time, the solely verbal description of 'the smell of fresh cut grass' was deemed initially inadequate, leading to a refusal of the first registration request. The Court of Appeal concluded, however, that the verbal description of 'scent of fresh cut grass' fulfilled the requirement of graphical representation set for trademark registration.

The Court reasoned its reversing decision by saying that 'if the objection is maintained, it would in fact amount to an absolute exclusion of olfactory marks, as there is no other more suitable graphical way to present them' than verbal description. Further, the reasoning acknowledged that even if the graphical representation in the form of verbal description presented by the applicant is not the sign itself, the law does not stipulate such a requirement. It drew a comparison to sound marks stating that musical notes are an acceptable form of representation and are not the music itself that will form the trademark. As olfactory marks are not explicitly excluded from trademark registration and are to be treated similarly to other types of signs, stricter rules should not be applied on scent marks without a basis found in the law. The smell of freshly cut grass was concluded to be a unique smell, which individuals immediately recognize from their past experiences, and trademark registration should be therefore approved.

This decision is one of the exceptions and the first registration of a scent mark in Europe that later elapsed as the applicant did not apply for renewal in 2006. The reasoning from the Court signals the ambition not to exclude any type of signs from the list of eligible marks that may act as a trademark and emphasizes the need to treat different mark types in an equal manner. This approach is in line with the underlying principles and the wide and open definition of trademark included into the earlier presented international treaties and agreements and as well present in the European trademark law. The smell of freshly cut grass was seen as a distinctive, capable of carrying a message, and forming the connection between the brand and the product in question. What is particularly interesting in this case is that the Court took a holistic perspective and assessed the capability of a sign, scent in this case, to act as a trademark instead of focusing on the sign's ability to fulfill the technical criteria for registration. The Court drew as well a parallel between scent and sound marks, which have been accepted to be represented through notes. As stated in the opinion of the Court, notes do not represent the mark itself but are described through an intermediary of notes. Thus, in case scents were represented in a similar fashion like music or colors through an intermediary, smell marks would meet the criteria set for representation in the European Union.

5.1.4 Chanel of France (1994) in the United Kingdom

In case of Chanel's application to register its famous Chanel No.5 in 1994, the United Kingdom Intellectual Property Office refused the application after concluding that the applicant was trying to register a product character, not a sign indicating the origin of the product. Chanel had included into its registration application a complex text description of the scent as follows '...aldehydic-floral fragrance product, with an aldehydic top note from aldehydes, bergamot, lemon and neroli; an elegant floral middle note, from jasmine, rose, lily of the valley, orris and ylang-ylang; and a sensual feminine note from sandal, cedar, vanilla, amber, civet and musk'.¹⁹² The United Kingdom Intellectual Property Office declined the application basing the refusal on the purpose of the product, meaning that the application was seeking to protect an element that was the essence of the product, valuable to the functioning of it or actually a part of the product itself.¹⁹³ Further, it stated in the ruling that the mark could not be considered to indicate the source of the product.¹⁹⁴

Trademark Directive 2015/2436 like its predecessor 2008/95EC aims to harmonize trademark law and protection in the European Union. Looking at the decision and reasoning of United Kingdom Intellectual Property Office from the perspective of the currently prevailing European level legislation that should guide the United Kingdom national legislation as well, Chanel's application to register the famous scent would not be successful, and the decision would not be changed. According to the absolute grounds of refusal of the Trademark Directive 2015/2436 Article 4, a sign cannot be registered as a trademark in case sign 'consists exclusively of...(i) the shape or another character, which results from the nature of the goods themselves, (ii) the shape or another character, of goods which is necessary to obtain a technical result, (iii) the shape or another character which gives substantial value to the goods'. Based on the explanation of the United Kingdom Intellectual Property Office, the scent is seen as a necessary element of the functioning of the fragrance product, and it gives the commercial value to the product. Additionally, it may be argued that perfume fragrances may be protected through other forms of intellectual property, such as copyright as a piece of original, creative work, and therefore granting trademark protection for a scent in this case would

¹⁹² Guillemin Claire, *Law & Odeur – Fragrance Protection in the Fields of Perfumery and Cosmetics*, Nomos Verlag, 2016, p.112

¹⁹³ WIPO Magazine, *Smell, taste and taste – getting a sense of non-traditional marks*, February 2009, https://www.wipo.int/wipo_magazine/en/2009/01/article_0003.html

¹⁹⁴ Kapoor Sanya, Gupta Riya, *The five senses and non-traditional trademarks*, Amity Law School, published 2018, <https://supremoamicus.org/wp-content/uploads/2018/10/V8A26.pdf>

create an overlap situation between the intellectual property rights that is not a desirable or reasonable state.

5.1.5 Other famous cases: *Eli Lilly (R-120/2001-2)* and *Levola Hengelo BV v Smilde Foods BV (C-310/17)*

Even though not related to scent marks as such, the case of Eli Lilly, where the company tried to register a taste of artificial strawberry for its medicine as a Community Trademark,¹⁹⁵ and the case of *Lebola Hengelo* involving an alleged infringement of copyright of a taste of cream cheese¹⁹⁶ provide interesting insights on what can constitute a registrable sign, and representation challenges in the European Union.

In case of *Eli Lilly (R-120/2001-2)*, the application made to register a taste sign of artificially strawberry as a Community Trademark for a medicine was declined by the Office for Harmonisation in the Internal Market (OHIM) by stating the proposed taste is not distinctive as the intent of using such a taste in combination with a medicine is to hide the unpleasant taste of the original product and as a matter of fact, the proposed sign is a product feature applied on the medicine to make it more appealing for the consumer, not to function as a trademark. OHIM referred as well to the fact that doctors would be prescribing the medicine, making the taste of the medicine irrelevant in the decision process, and noted that registering such a common taste flavor would limit competition unnecessarily. During the appeal process, claims were made that consumers would not understand the taste sign as an indication of the origin, nor would they be able to experience it prior to taking the medicine. Interestingly enough, OHIM took the approach to focus on the inability of the proposed taste to function as a trademark from the consumer's point of view instead of claiming the representation challenges that were apparent in the case, when only a verbal description of the scent was provided.

The *Levola Hengelo BV v. Smilde Foods BV* – case concerned a dispute in which Smilde Foods brought into the market a Dutch cream cheese that was claimed by *Levola Hengelo* to infringe their copyright on a taste of a prior, similar cream cheese. After initial proceedings in the Netherlands, the case was brought in front of the Appeal Court, which sought advice from the European Court of Justice. Discussing the copyright content of

¹⁹⁵ Decision on the Second Court of Appeal of 4 August 2003 in case of R-120/2001-2, Appeal relating to Community trademark application no 1452853 by Eli Lilly, <http://www.copat.de/markenformen/r0120-2001-2.pdf>

¹⁹⁶ Judgement of a Court (Grand Chamber), 13 November 2018, *Levola Hengelo BV v Smilde Foods BV*, C-310/17, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:62017CJ0310&from=EN>

the case is not relevant in the context of this thesis but Advocate General Wathelet's opinion and reasoning on the representation of taste sign can be applicable as well in case of scent marks. After evaluating the case from Dutch legislation and European copyright law point of view, Wathelet took the stance that the representation of a taste mark and description of the protectable subject matter needs to be precise and objective to be protectable under copyright law, similar to the Sieckmann criteria in case of trademarks. According to the opinion, the taste of food cannot be described objectively or accurately, as the taste experience is individual, varies based on the personal qualities of the person tasting the product as well as depends on the external circumstances. The argument that a taste or scent sign may not be experienced in the same manner and get the same meaning by all individuals encountering them is one of the arguments as well against registering and protecting these signs as trademarks.

5.1.6 Conclusions from the Landmark Cases

Even though the number of cases in which the subject matter of a national or European trademark application has been a scent mark is limited, the common denominator seems to be that representation of the smell sign is presented as a verbal description, a photo of the object that emits the scent, as a chemical formula or even as a sample of the odor. All of these are representation types that are suited for and applied in case of visual signs or traditional trademarks, but not well-fitted to nontraditional or nonvisual marks. As trademark legislation in the European Union is harmonized based on the Trademark Directive 2015/2436 and Regulation 2015/2424, the region is open to accept and consider nonvisual and nontraditional signs as eligible marks for registration. However, for this to happen, the technological development needs to progress to the level, where representation types and methodologies reach the maturity that satisfies the Sieckmann criteria. As has been discussed in relation to the presented landmark cases, the fulfillment of the representation criteria is not the only consideration that may hinder registration of scent marks and those will be explored in the next, final section of this thesis.

6 MARKETING THEORIES & TRADEMARK LAW: REGISTER OR NOT TO REGISTER?

Marketing theories indicate that scents have the capability of indicating the origin of the goods and distinguishing them from the competing alternatives in the market. At the same time, international and European legal frameworks are amended to include a wide and open definition of a trademark and opening opportunities to register non-traditional signs as trademarks. Scent technologies are simultaneously developing solutions to identify, store and reproduce smells in a manner meeting the representation criteria in the European Union. All signals are positive and indicating that scent marks are about to emerge as a fully recognized and eligible signs qualifying for trademark registration, but is it as simple as this? The question must be asked whether we should register and grant protection to any sign that can perform the core functions of a trademark and that can meet the representation criteria with the help of emerging technologies or are there other considerations against registering and granting trademark protection for scents. Or should we make further changes to the European legislation as we see the emerge of non-traditional signs in the market? This final section of the thesis will discuss the alignments and controversies between marketing theories and trademark law, present possible other considerations arguing for or against registering scents as trademarks in the European Union and propose possible alterations to the current legislation in the region based on the findings.

6.1 Scents in the function of a trademark

Krishna, Lwin and Morrin confirmed in their earlier presented study on ‘olfaction, sense of smell and memory’¹⁹⁷ that when a distinctive scent is applied on a product, consumers’ ability to recall the brand and related product information is strong and enhanced. On the contrary, they found that an ambient scent dispersed into the atmospherics is weaker in performing this task but does facilitate and improve the shopping experience. The finding is in line with the ambition of the European trademark law to grant protection for distinctive signs that are capable of forming a strong connection between a scent and a product and differentiating these goods from the competing alternatives. Thus, the European trademark law is formulated quite correctly from the marketing theories point of view to provide protection for the former case in Krishna et al study, where a distinctive scent is attached to a product and forms a close connection to the product.

¹⁹⁷ Krishna Aradhna, Lwin May O, Morrin Maureen, Product Scent and Memory, *Journal of Consumer Research*, vol. 37, no. 1, 2010, pp. 57–67. JSTOR, www.jstor.org/stable/10.1086/649909

This formed connection and capability to communicate with the consumer and convey the image and messages to the target audience is the most valuable part of brand's goodwill that should be protected from marketing point of view.

Considering the increasing usage of unconventional brand elements in the marketing management activities and innovations in scent technologies that will overcome representation challenges in the European Union, the pressure to register non-traditional signs can be expected to increase in the coming decades. On one side, as stated earlier, after the removal of graphical representation requirement in the European Union level legislation and in line with the trend in the international treaties and agreements, the definition of the protectable subject matter in the European trademark law has become wide and open, inviting a wide range of signs for registration. This has been criticized to mean that any sign that can be claimed to distinctive could be registered as a trademark. The danger is that primary or secondary scents in Hammersley's categorisation, that is natural product features or scents applied to the surroundings, will be attempted for registration, even if they lack distinctiveness. The functional, natural, or valuable product or service features should not be registered as a trademark based on the absolute grounds of refusal stated in Trademark Directive 2015/2436 and European Trademark Regulation 2017/1001 that limit the scope of signs eligible for registration.

As a preparation to the challenge of emerging non-traditional signs, research in the field of brand building and recognition provides a good foundation for considering which type of signs and in which context can act in the function of a trademark. Legislators should take actions to prevent distinctiveness eroding to mean that any sign that can be recognized by a human sense can be registered, and instead require evidence that a sign proposed for registration has the actual capability of establishing a connection between the scent and the product as is argued to happen according to the marketing theories.¹⁹⁸ This approach mirrors the proposal made by Dinwoodie, where the legislators and courts are urged to leave the analysis of the ontology that is the technical appearance of a sign aside, and focus on assessing the functional capability of a sign to act as a trademark as a pre-condition for registration.¹⁹⁹ Interestingly enough, the Standing Committee for

¹⁹⁸ Calboli Irene, *Chocolate, Fashion, Toys and Cabs: The Misunderstood Distinctiveness of Non-traditional Trademarks*, *International Review of Intellectual Property and Competition Law*, January 2019, Volume 49, Issue 1, p.1-4

¹⁹⁹ Dinwoodie Graeme B, *The Death of Ontology: A Teleological Approach to Trademark Law*, Chicago-Kent College of Law, January 1999, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=205328

Law of Trademarks, Industrial Designs and Geographic Indications (SCT) recommended in 2006 in its 16th announcement on 'New Types of Trademarks'²⁰⁰ that the distinctiveness of a sign should be evaluated by analyzing its position and performance as a trademark in the market, establishing to what extent it is recognized amongst the target audience, and assessing the nature of the sign to confirm it is not functional, natural or valuable part of a product. This approach contains elements from the approach taken in the field of marketing management to assess the use and impact of different brand elements in brand recognition and identification in the target market, as well as resembles the evidence to be shown to prove acquired distinctiveness.

As the European trademark law is moving towards the new era forced by the modern marketing activities, the recommendation from SCT resonates well with the need to ensure that the protectable subject matter is not only distinctive and can be represented but can perform the functions of a trademark effectively and in the market. The determination on which signs can fulfill these tasks should be done by carefully evaluating not only the signs own internal and technical qualities in terms of uniqueness and representability but as well base it on the sign's position, usage and impact in the market in comparison to competing signs, and its strength amongst consumers.

6.2 Scents as a product feature

Trademarks are a particularly appealing form of intellectual property for businesses as protection of commercially used signs can be renewed for unlimited period of time, in ten-year intervals, while other forms of intellectual property, such as patents, designs and copyrights have a limited duration after which the innovation or creative work is available for use by other actors in the market. Trademarks require rather limited disclosure of information against the granted exclusive right in contrast to for example patents that require a full disclosure of details behind the innovation in a format known to skilled in art that will enable competitors to access the data, innovate around and build on it.²⁰¹ The reasoning for this difference is stemming from the commercial nature of trademarks aiming to protect the previously described connection formed between the sign and the product, while patents aim to promote innovation and copyright works to

²⁰⁰ World Intellectual Property Office (WIPO), Announcement from 16th session on Nov 13 to 17, 2006 https://www.wipo.int/edocs/mdocs/sct/en/sct_16/sct_16_2.pdf

²⁰¹ Calboli Irene, Hands Off My Colors, Patterns, and Shapes! How Non-traditional Trademarks Promote Standardization and May Negatively Impact Creativity and Innovation, Texas A&M University School of Law, <https://scholarship.law.tamu.edu/cgi/viewcontent.cgi?article=2346&context=facscholar>

protect and encourage creative works that are often build on the previous work by others.²⁰²

As presented in the marketing theory section earlier, marketers apply and develop product features typically to make the goods more attractive for consumers, to enhance their consumption or purchasing experience instead of considering that an added scent would be a sign acting as a trademark for the product. Smells are often applied in the sensory and experience marketing activities in combination with visual or sound marks as directing the stimulus to multiple senses strengthens the impact. A specific smell may be distinctive in relation to a product category and in the given context and could qualify for registration based on this, but it may be argued that while it is unique and valuable in terms of attracting business and appealing to consumers, the purpose of the legislation should not be to grant protection for such features that were not meant to distinguish a product in the market, but were meant to be merely a product feature or a promotional element, often used in combination with other signs.²⁰³ The question is whether the legislator intended to protect this type of signs as trademarks, when the regulations were drafted, or has the evolution in the marketing arena created a new situation that was not present at the time of preparatory works. While the list of possible protectable subject matters under trademark law is extending, the absolute grounds of refusal in Trademark Directive 2015/2436 and European Trademark Regulation 2017/1001 are in an essential position to safeguard the correctness of registrations and could be altered to address the above presented concern about registering distinctive scents that were designed to product features instead of trademarks.²⁰⁴

Protecting a technical function, design or promotional element or aesthetics of a product as a trademark may lead to an overlap with another intellectual property right, such as copyright, product design or even patent, which may be better suited for protecting such creative works or innovations. The recommendation would be to consider providing for scent product characteristics, which have been developed and applied due to other

²⁰² Calboli Irne, Hands Off My Colors, Patterns, and Shapes! How Non-traditional Trademarks Promote Standardization and May Negatively Impact Creativity and Innovation, Texas A&M University School of Law, <https://scholarship.law.tamu.edu/cgi/viewcontent.cgi?article=2346&context=facscholar>

²⁰³ Calboli Irene, Hands Off My Colors, Patterns, and Shapes! How Non-traditional Trademarks Promote Standardization and May Negatively Impact Creativity and Innovation, Texas A&M University School of Law, <https://scholarship.law.tamu.edu/cgi/viewcontent.cgi?article=2346&context=facscholar>

²⁰⁴ Calboli Irene, Chocolate, Fashion, Toys and Cabs: The Misunderstood Distinctiveness of Non-traditional Trademarks, *International Review of Intellectual Property and Competition Law*, January 2019, Volume 49, Issue 1, p.1-4

purposes than acting as a trademark, another type of intellectual property protection, such as a copyright or design protection.²⁰⁵

6.3 Scent protection impacts market competition and innovation

As stated earlier, according to the absolute grounds of refusal in Trademark Directive 2015/2436 and European Trademark Regulation 2017/1001, such characteristics as scent may be a natural, functional, valuable or essential part of a product, and consequently cannot be registered as a trademark.²⁰⁶ In addition to the overlap with other intellectual property forms, the risk in granting protection for a characteristic or design feature that is common for products offered in a certain product category is that a strong position is created for one of the product alternatives in the market that may lead into a monopolistic situation that limit market competition. A possible successful registration of a product characteristic will enable the proprietor to benefit of the protected product feature for eternity and prevent unauthorised use of identical or similar signs in case of likelihood of confusion in the product category.²⁰⁷ Typically disputes on unauthorised usage are settled outside the court, and thus, the extent and seriousness of the impact on limiting competition and creation of monopolies may not even fully surface due to this. Further, according to so called depletion-theory, the number of such marks as scents or colours is limited in supply as even if there are numerous alternatives in theory, in practise from marketing management point of view only a few of these are suitable to function as a trademark in relation to certain product categories.²⁰⁸ This means that giving an exclusive right on a specific scent mark may lead to depletion that exhausts the amount of eligible scent marks fit to act as a trademark by creating not product, but scent monopolies in the market.

In addition to the negative impacts on market competition, Irene Calboli has argued that registering non-traditional trademarks drives standardisation of products as companies aim to maximise the short-term return from the registered signs, are required to

²⁰⁵ Odintsov Stanislav V, Trubina Marina V, Mansour Mohammad, 'Comparative legal analysis of protectability of olfactory trademarks', *Amazonia Investiga*, Volume 9 – Issue 27 / March 2020, https://www.researchgate.net/publication/340122068_Comparative_legal_analysis_of_protectability_of_olfactory_trademarks

²⁰⁶ Karapapa Stavroula, Registering scents as community trademark, *The Trademark Reporter*, 100(6), pp 1335-1359, https://www.researchgate.net/publication/322702550_Registering_scents_as_community_trade_marks

²⁰⁷ Calboli Irene, Hands Off My Colors, Patterns, and Shapes! How Non-traditional Trademarks Promote Standardization and May Negatively Impact Creativity and Innovation, *Texas A&M University School of Law*, <https://scholarship.law.tamu.edu/cgi/viewcontent.cgi?article=2346&context=facscholar>

²⁰⁸ Reimer Erin M, A Semiotic Analysis: Developing New Standard for Scent Marks, *14 Vanderbilt Journal of Entertainment and Technology Law* 693 (2020), <https://scholarship.law.vanderbilt.edu/jetlaw/vol14/iss3/5>

consistently utilise the mark in their business activities to maintain the exclusive right in force, and consequently cut investments in innovation and product creation, and even deteriorate the quality of the current products.²⁰⁹ Trademark registration of a product feature impacts both actions and interest of a trademark holder, who becomes complacent with current status, and competitors, who are limited with the exclusive right and this phenomena leads to lower competition, declining investments into innovations and product quality. Further, Calboli has argued that if a non-traditional sign has cultural or social value amongst certain people and in specific context, protecting such an element under trademark law may have serious impacts on cultural heritage or freedom of expression.²¹⁰

Based on the above discussion, prior to granting trademark protection for a sign, such as a distinctive scent, evaluation of the possible impacts on the market dynamic, competition and consumers should be conducted, and availability of the eligible signs should be assessed to avoid the described negative impacts.

6.4 Ethical considerations in using scents in consumer business

As presented earlier, the driving force behind marketers increasingly utilising scents in the brand building and promotional activities is the tested power and positive impact of smells on brand identification and recognition, consumer loyalty and experience. Due to the human physiology, scent marks influence our emotions directly, in an unbiased and uncontrolled manner. Concerns have been raised that digitalization and increasing usage of scents in marketing creates an opportunity for manipulating consumers, even creating untrustworthy smells, and misusing these against competing, registered scent marks.²¹¹ Marketing activities based on smells and scent trademarks may be considered manipulative as emotions are evoked unconsciously and decisions made without rational reasoning.²¹² Considering this, if we have regulations preventing subconscious audio-

²⁰⁹ Calboli Irene, Hands Off My Colors, Patterns, and Shapes! How Non-traditional Trademarks Promote Standardization and May Negatively Impact Creativity and Innovation, Texas A&M University School of Law, <https://scholarship.law.tamu.edu/cgi/viewcontent.cgi?article=2346&context=facscholar>

²¹⁰ Calboli Irene, Chocolate, Fashion, Toys and Cabs: The Misunderstood Distinctiveness of Non-traditional Trademarks, *International Review of Intellectual Property and Competition Law*, January 2019, Volume 49, Issue 1, p.1-4

²¹¹ Cross John T, Trademark issues related to digitalised flavour, *Yale Journal of Law and Technology*, Volume 19/2018, Issue 1, <https://digitalcommons.law.yale.edu/cgi/viewcontent.cgi?article=1132&context=yjolt>

²¹² Wolangiewicz, How, it at all, should the law of trademarks adapt to the rise of sensory marketing?, *Wroclaw Review of Law, Administration & Economics*, 7(2), p40-57, December 2018, https://www.researchgate.net/publication/329343664_How_if_at_All_should_the_Law_of_Trademarks_Adapt_to_the_Rise_of_Sensory_Marketing

visual advertising due to ethical considerations and stating that consumers must be able to make their choices based on conscious and rational selection and decision making process, should we not see the scent-based marketing and scent marks in a similar fashion, and prevent registration of scent marks with the same reasoning?²¹³ It is of course so that simply declining trademark protection of scent marks may not prevent companies using smells in their marketing activities, so simple exclusion may not trigger the desired end-result of protecting consumers and preventing misuse.²¹⁴ This risk of misuse together with the fact that scents can impact our decision making and emotions without a conscious consideration have been used to argue that smells are not suitable to function as a trademark due to their very nature and should be avoided in such functions.

6.5 Scents as a personal experience

As stated earlier in the section discussing the sense of smell, scents are highly personal and intimate in nature, and humans experience them differently depending on our cultural background, past experiences and even surrounding circumstances.²¹⁵ Doubts may be raised on whether perception of smells is homogenous enough amongst the target audience to allow them functioning as trademarks. As argued by John T Cross in case of flavours, that is relevant and applicable for scents as well, the significant differences between individuals' taste buds which detect flavours indicate that no two persons will experience the taste object in a similar manner that would allow protection of the connection that is formed between the taste sign and the product.²¹⁶ Can we, thus, register a scent mark that has a variation in meaning and will be experienced differently by individuals in the target audience? As stated earlier, the trademark law aims to protect the connection formed between the scent and the product in question that becomes

²¹³ Wolangiewicz, How, it at all, should the law of trademarks adapt to the rise of sensory marketing?, *Wroclaw Review of Law, Administration & Economics*, 7(2), p40-57, December 2018, https://www.researchgate.net/publication/329343664_How_if_at_All_should_the_Law_of_Trademarks_Adapt_to_the_Rise_of_Sensory_Marketing

²¹⁴ Wolangiewicz, How, it at all, should the law of trademarks adapt to the rise of sensory marketing?, *Wroclaw Review of Law, Administration & Economics*, 7(2), p40-57, December 2018, https://www.researchgate.net/publication/329343664_How_if_at_All_should_the_Law_of_Trademarks_Adapt_to_the_Rise_of_Sensory_Marketing

²¹⁵ Odintsov Stanislav V, Trubina Marina V, Mansour Mohammad, 'Comparative legal analysis of protectability of olfactory trademarks', *Amazonia Investiga*, Volume 9 – Issue 27 / March 2020, https://www.researchgate.net/publication/340122068_Comparative_legal_analysis_of_protectability_of_olfactory_trademarks

²¹⁶ Cross John T, Trademark issues related to digitalised flavour, *Yale Journal of Law and Technology*, Volume 19/2017, Issue 1, <https://digitalcommons.law.yale.edu/cgi/viewcontent.cgi?article=1132&context=yjolt>

valuable when this link is acknowledged by the target market. Trademark does not protect the goods in question, nor the sign alone as a separate entity. It is not relevant whether consumers get the same experience, emotional response or draw the same conclusion on the product based on the encounter with the sign as the purpose of a trademark is to protect the sign-brand-product connection, not the actual content of the message. The varying interpretation of a sign by the individuals in the target audience may be, however, a concern that should be addressed and considered by the marketers prior commencing a use of a particular scent as a product feature or as a trademark.

6.6 Other considerations related to scents as trademarks

The ability of scents to function as a trademark has been questioned based on two further considerations: a) consumers are not able to observe the smells necessarily at the time of purchase and b) they are not able to specify the scent without an expert or appliance aid. In order to act as a trademark, a consumer must be able to experience the scent at the time of making the purchase decision and acknowledge the existence of a trademark, not only at the time of consumption or in an after-sale situation. It is often physically impossible to experience a scent at the time of purchase as the smell is only released at the time of consumption.²¹⁷ Scents are, thus, similar to tastes, which may be distinctive in nature as such, but have challenges in acting as a trademark due to the fact that tastes can only be experienced after tasting the actual product, and consumers tend to learn to connect the taste with a product only after trialing it.²¹⁸ This discussion raises the relevant aspect of considering when the scent sign is observable as we evaluate the capability of a scent mark to act as a trademark in the registration process.

According to the Sieckmann criteria, competent authorities, competitors and general public should be able to identify the protectable subject matter without an expert or technological assistance. It is challenging to establish that an average consumer perceives a particular scent as indicating the source instead of seeing it as an attractive characteristic of a product, and does this at the time of purchase, when it is most relevant considering the functions of a trademark. Consumers may like the scent of a product that

²¹⁷ Kumar Abhijeet, Protecting Smell Marks: Breaking Conventionality, *Journal of Intellectual Property Rights*, Vol 21, p 129-139, May 2016,
<http://nopr.niscair.res.in/bitstream/123456789/34726/1/JIPR%2021%283%29%20129-139.pdf>

²¹⁸ Wolangiewicz, How, if at all, should the law of trademarks adapt to the rise of sensory marketing?, *Wroclaw Review of Law, Administration & Economics*, 7(2), p40-57, December 2018,
https://www.researchgate.net/publication/329343664_How_if_at_All_should_the_Law_of_Trademarks_Adapt_to_the_Rise_of_Sensory_Marketing

facilitates and encourages them to make the purchase decision, but this is different than consumers acknowledging the scent as indicating the origin of the goods and the brand.²¹⁹ As scents evoke emotions unconsciously, this physiological reality confirms that the acknowledged and understood connection between the product and the encountered scent may be questioned. Even if this connection could be shown, the likelihood of possible confusion happening and the limit until which a scent can be identified with certainty without expert or technological support depend on the sensitivity of the human sense of smell to distinguish and differentiate smells that is a relatively unknown factor still today and known to vary.²²⁰ Today we are faced with an information overload, are we going to be navigating in an even increasing overload of scents in the future, and what happens to our ability to differentiate, identify and understand the meaning of scents in that environment?²²¹

6.7 Suggested amendments to the trademark law in European Union

As a result of the acknowledged potential and increasing usage of scents in brand building and marketing management, and after adopting the wide and open definition of trademark in trademark law in Europe, legislators should carefully consider whether ‘any sign’ that is able to fulfil the registration requirements according to prevailing legislation should be granted an exclusive right for an unlimited time period. As a matter of fact, the presented arguments in this thesis suggest that the emphasis should be put on evaluating the functional capability of a sign to act as a trademark in the registration process instead of focusing on its ability to fulfil the technical criteria of distinctives and representation requirements.

When connecting the presented marketing theories with evaluation of the currently prevailing trademark law in the European Union and contrasting this with the raised concerns in literature, the following recommendations emerge on what the law (Lex Ferenda) should be in case of scent mark protection in the European Union:

²¹⁹ Shambarta Marilena, Can non-traditional signs, such as colours, scents and sounds be protected under Trade Mark Law? If not, what are the alternatives to do so? A comparative analysis between Europe and United States of America, http://mslawyers.eu/images/publication_documents/Can_non-traditional_signs_such_as_colours_scents_and_sounds_be_protected_under_Trade_Mark_Law.pdf

²²⁰ Kumar Abhijeet, Protecting Smell Marks: Breaking Conventionality, *Journal of Intellectual Property Rights*, Vol 21, p 129-139, May 2016, <http://nopr.niscair.res.in/bitstream/123456789/34726/1/JIPR%2021%283%29%20129-139.pdf>

²²¹ Mishra Neha, ‘Registration of non-traditional trademarks’, National Law School of India University, November 2007, https://www.researchgate.net/publication/298463513_Registration_of_non-traditional_trademarks

The first recommendation would be to put more emphasis on confirming the capability of a sign, including scent signs, to act in the function of a trademark in the registration process. This could mean altering the registration requirements to include a deeper evaluation of the evidence to confirm that the proposed protectable subject matter has the capacity to form a connection with the product and indicate the origin of the product at different stages of consumption process. The measure should be the target audience's ability to recognize and acknowledge the formed connection. This suggestion resembles the concept of 'secondary meaning' used in the USA that refers to a phenomenon, where the meaning of a particular product feature transforms in the consumer's mind to indicate the source of the product instead of just representing the product alone.²²² It should be further established that the smell is truly used as a trademark, that is for example attached to the product as an indication of the brand, launched to function as a trademark in the first place and observable by the consumers at the relevant time.

The second recommendation would be to install a more holistic evaluation requirement as a part of the registration process to assess the possible market, competition, and consumer impacts of registering the proposed sign in order to avoid creating possible scent monopolies or unnecessarily limiting competition in the market. The content of the absolute grounds of refusal could be assessed to include preventing registration of signs with negative market and competition impacts, and stricter approach could be taken to impose the current rules to exclude product features and functional characteristic from registration.²²³

The proposal on what the law should be suggests extending the evaluation in the registration phase beyond requirements of distinctiveness and representation and putting focus on establishing that the proposed sign has the capability to function as a trademark with least negative impact on the market competition. This would make the European trademark law better fit to respond to the emerge of non-traditional signs after representation challenge is solved by scent technologies and improve legal predictability and security of registering the right signs.

²²² Cross John T, Trademark issues related to digitalised flavour, *Yale Journal of Law and Technology*, Volume 19/2017, Issue 1, <https://digitalcommons.law.yale.edu/cgi/viewcontent.cgi?article=1132&context=yjolt>

²²³ Calboli Irne, Hands Off My Colors, Patterns, and Shapes! How Non-traditional Trademarks Promote Standardization and May Negatively Impact Creativity and Innovation, *Texas A&M University School of Law*, <https://scholarship.law.tamu.edu/cgi/viewcontent.cgi?article=2346&context=facscholar>

7 CONCLUSION: SCENT MARK PROTECTION IN THE EUROPEAN UNION

Brand owners are increasingly exploiting the potential of applying sensory and experience marketing techniques to improve their brand recognition and loyalty and using scents to impact consumer behaviour and choices through their emotions. Amongst the traditional and unconventional elements, scents are one of the most powerful tools to form a strong, long-lasting, and emotional connection between the product and the consumer. Based on research, consumers can reliably, although most often unconsciously, recognize and recall a brand and differentiate it from the competing alternatives based on a scent mark. The brand identification is particularly strong, when a unique, unnatural, and exceptional scent is combined to a product directly, while a scent applied in the surroundings does not trigger the same effect. From brand building perspective and based on the research conducted, scents can independently or in combination with other signs effectively distinguish goods in the market and can be argued to possess the capability of acting as a trademark.

The purpose of trademarks is to reliably distinguish products provided by one company from those marketed by other competing companies without a risk of confusion. Trademark reform of 2017 adjusted the prevailing legislation in the European Union to respond to the development in marketing methods and to the use of non-traditional elements in brand building. The reform extended the definition of the protectable subject matter by removing requirement of graphical representation and opened the door for registering non-traditional signs in addition to harmonizing trademark law and regulations in the member countries of the European Union. Despite the removal of the graphical representation requirement, until now only a limited number of scent mark applications have been made in different national jurisdiction and to register smell signs under the European Trademark system. In order to qualify for trademark registration in the European Union, a sign must be inherently distinctive or have acquired distinctiveness through use in its product category, and it must be represented in a clear, precise, self-contained, easily accessible, durable, intelligible and objective manner. Scent signs continue to have challenges in meeting the representation criteria even after abolishment of the graphical representation requirement. Scents that are typical, natural, or functional characteristic of a product cannot be registered as registration of such features would create an undesired monopoly and limit market competition.

According to Trademark Directive 2015/2436 and European Trademark Regulation 2017/1001, a sign is permitted to be represented in any appropriate form using generally available technology. This opens an opportunity for the national and European legislators to implement new scent technologies to identify, specify and store scent marks and establish a common system for registering scents into a database as soon as solutions are available in the market. Although current maturity of scent technologies still lacks on accuracy and reliability, it can be anticipated that technological advancements to identify, store, and reproduce scents will provide tools and methodologies to represent scent marks in a precise and clear manner, fulfilling the representation requirements in the European Union, in the future.

Even if scent signs fulfil the distinctiveness criteria and may be represented in a manner satisfying the Sieckmann criteria, it does not yet imply that these signs should be protected and registered as trademarks. Evaluation of the presented marketing theories and currently prevailing trademark law suggests that the focus should be put on going beyond the current criteria of distinctiveness and representation to ensure that signs with demonstrated capability and intention to act as a trademark gain protection. The recommendations to alter trademark registration process are two-folded; First of all, more evidence should be required in the registration phase on the capability of a proposed sign to act as trademark, and particularly on the formed connection between the mark and the product that is recognized by the target audience. Secondly, possible impacts of registering the proposed subject matter on the market dynamic, competition or consumer should be estimated before granting an exclusive right, and formulation of the absolute grounds of refusal should be used to prevent registration of signs with negative impact on competition.

By adopting these recommendations, the European trademark law would lower the possibility of registering signs that are functional, natural or typical product features in the product category and not intended to work as trademarks, limit the possible negative impacts on the market dynamic, competition, and consumers from the registrations, and secure that signs that have a demonstrated capability to act as trademarks could in theory be granted protection and registered.

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