EU Opened Door for Sound Marks, Will Scent Marks Follow?

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Part I Introduction

For national trade mark offices in the EU and for OHIM, graphical representation was the insurmountable obstacle to the registration of non-traditional trade marks, such as sound, scent and taste marks, since the Sieckmann case. However, since all the countries of the EU are members of the Paris Convention, they have to accept registration of any trade mark, including non-traditional marks that have already been registered in another Paris Union country. The removal of the graphical representation requirement for registration, as advocated by Dr Ralf Sieckmann, recommended by the Max Planck Institute and proposed for amendment of Directive

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1. Part of the provisional agreement with MEPs on the reform of the EU trade mark system is that OHIM will be renamed ‘European Union Intellectual Property Office’. See, Recitals 2 and 8 draft Regulation, Recital 37 draft Directive, below n 5.
2. The numbers of registrations/applications of non-traditional Community Trade marks, especially scent marks, contrast sharply with those of traditional Community Trade marks. See the statistics until July 2015 (the first number represents the cumulative number of applications, the second the cumulative number of registrations, and the percentage represents the total registrations or applications). Word marks: 851,710 (59.28 percent)/671,212 (58.64 percent); Figurative marks: 574,123 (39.96 percent)/467,481 (40.84 percent); 3-D marks: 8,664 (0.60 percent)/5,007 (0.44 percent); Colour marks: 1,049 (0.07 percent)/347 (0.03 percent); Other marks: 1,025 (0.07 percent)/316 (0.03 percent); Sound marks: 246 (0.02 percent)/186 (0.02 percent); Hologram marks: 11 (0.00 percent)/4 (0.00 percent); Olfactory marks: 7 (0.00 percent)/1 (0.00 percent). In 2013 the number of applications for sound marks was 36, and 13 were registered. In 2014 this was 17/23 and in 2015 (until July) this was 9/5. Between 2013-2015 (until July) there were no applications for olfactory marks. Source: SSC009 - Statistics of Community Trade Marks until July 2015, available at: https://oami.europa.eu/tunnel-web/secure/webdav/guest/document_library/contentPdfs/about_ohim/the_office/SSC009-Statistics_of_Community_Trade_Marks-2015_en.pdf (accessed 19 July 2015). Dr Ralf Sieckmann pointed out that there were actually six applications for scent marks, instead of seven: one is a gustatory trademark of the taste of orange for a pharmaceutical, of N.V. Organon, see below, n 20.
4. Conform the tell-quell principle of Article 6quinquies (A)(1) Paris Convention for the Protection of Industrial Property. Tobias Cohen Jehoram, Het Benelux Merkenrecht in Europees Perspectief (Benelux trademark law in European perspective) (PhD Dissertation, University of Utrecht, 2009) 72. The EU countries are each member of WTO, each in their own right and as EU collectively. Therefore they are also via TRIPs bound to comply with the Stockholm Act of Paris Convention of 1967 (as amended on 28 September 1979).
2008/95 (Directive),⁶ and Council Regulation 207/2009 (Regulation),⁷ will open the door for the initial registration of non-traditional trade marks in the EU. The significance of scent marks for marketeers can hardly be overestimated. Scents, with their intimate access to the amygdala, are capable of conditioning consumers to remember a certain brand and to influence their moods: ‘A scent has a power of persuasion greater than words, appearances, feelings or willpower. The power of persuasion of a scent cannot be resisted; it enters into us like the breathing of air into our lungs, invading and perfectly fulfilling us.’⁸ The olfactory dimension can certainly play a role in the battle for the consumer’s favour and can help him or her further, in an era of information overload, to short-cut the search process.

In the preparatory discussions leading up to the final drafts, sound files were mentioned as proper ways to disclose sound marks to competitors. The next low hanging fruit that is getting ripe to be picked are scent marks. Technology has reached a threshold whereby scents can be digitally encoded, thus travel the internet, be stored, downloaded and decoded by the emittance of scents via affordable scent printers connected to smart phones. This and other technologies will be assessed in light of the remaining Sieckmann representability requirements: clear, precise, self-contained, easily accessible, intelligible, durable and objective.⁹

To find a pathway to register scent marks will become especially important for the registration of taste marks. One should realise that flavour is the perception of the combination of scent and the five tastes on the tongue. However, it is estimated that scents contribute for approximately eighty percent to taste, and the combination of the five tastes on the tongue contribute to only approximately twenty percent.¹⁰

This article delineates the representability requirements in relation to scent marks at the newly coined EU Intellectual Property Office, and the national trade mark offices in the EU. The issue of distinctive character, which is another requirement for the registration of trade marks has been dealt with elsewhere.¹¹ Besides, scent’s capability of distinguishing goods or services of one undertaking from those of other undertakings is uncontroversial.¹² This article will not touch upon

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⁹ See above, n 3, para 55.
the functionality doctrine, nor on the possibility\textsuperscript{13} or impossibility\textsuperscript{14} of protecting fragrances via copyright law.

First this article provides a historical overview of scent marks (Part II Petty Past, Promising Future); then it gives an overview of how graphical representability felt from grace, and how this resulted in proposals to amend the Directive and Regulation (Part III Removing the Graphical Representation Requirement); followed by an overview of possible ways to register a scent mark within the remaining requirements (Part IV Pathways to Representability); and, finally the article finishes with the conclusion (Part V Conclusion).

**Part II Petty Past, Promising Future**

This Section provides an overview of the rise and fall, slumber and resurrection, of scent marks in the EU. For the EU the following periods can be distinguished: the pre-\textit{Sieckmann} era, in which the UKIP Office in 1996 and Benelux Trade Mark Office in 1998 allowed for the registration of only a few scent marks, and when OHIM allowed for only one fragrance to be registered in 2000 as Community trade mark. The watershed moment was 2002, when the ECJ decided the \textit{Sieckmann} case,\textsuperscript{15} in which it provided comprehensive representability requirements to guarantee legal certainty. The graphical representation requirement lulled the registration of scent marks into a slumber in the EU between 2002 and 2015. However, a quarter century after the first scent mark was registered in the US in 1990, the removal of the graphical representation requirement from the EU trade mark system opens the way for sound marks and in its wake scent marks.

**Pre-\textit{Sieckmann} era**

The US was the first country that accepted the registration of a scent as a trade mark in 1990.\textsuperscript{16} The Trademark Trial and Appeal Board accepted the description ‘high impact, fresh floral fragrance reminiscent of Plumeria blossoms’ as sufficiently representing the scent for sewing thread and embroidery yarn.\textsuperscript{17} After \textit{In re Clarke}, the USPTO changed its guideline to accommodate the registration of scent marks: instead of submitting a drawing one needs to submit a written description\textsuperscript{18} and a specimen,\textsuperscript{19} and, just like any other US trade mark, evidence of actual

\textsuperscript{13} See P. Bernt Hugenholtz, ‘Auteursrecht op (de geur van een) parfum’ (Author’s right on (the scent of a) perfume), Annotation Dutch Supreme Court 16 June 2006 (Kecofa / Lancôme) ARS AEOUI (2006-11) 821-824.
\textsuperscript{15} See above, n 3.
\textsuperscript{17} \textit{In re Clarke} 17 U.S.P.Q. 2d (BNA) 1238 (T.T.A.B. 1990).
\textsuperscript{19} The USPTO Examiner needs to be able to smell the scent, to determine whether the specimen shows use of the mark in connection with the good. 904.03(m) Specimens for Scent and Flavor Marks, Trademark Manual of Examining Procedure, USPTO, January 2015. A ‘scratch and sniff’ sticker for a scent mark is an acceptable specimen, ibid.
use and secondary meaning. The Lanham Act did not have any graphical representation requirement, and the US have been generous ever since in registering all kinds of non-traditional marks,\textsuperscript{20} confirmed by the Supreme Court in \textit{Qualitex} in 1995.\textsuperscript{21}

In 1988 Council Directive 89/104/EEC (Directive)\textsuperscript{22} was promulgated, aimed to approximate the rules on trade marks, including the registration process itself. Article 2 Directive prescribed the graphical representability, which the, at the time, members of the European Communities should implement into their jurisdictions. An example is Section 1(1) UK Trade Marks Act of 1994. However, the UK implemented this requirement in a lenient way for scent marks. In 1996 it allowed for the registration of a scent mark by the description ‘strong smell of beer’\textsuperscript{23} for darts, and a scent mark by the description of ‘smell of roses’ for tires.\textsuperscript{24} Interestingly, the definition of a Benelux mark in the Uniform Benelux Law on Marks, effective between 1971 and 2006 did not state a graphical representation requirement.\textsuperscript{25} Only its successor, the Benelux Convention on Intellectual Property did prescribe the graphical representability requirement.\textsuperscript{26} In 1998, the Benelux Trade Mark Office allowed for the registration of the ‘smell of freshly cut grass’ for tennis balls.\textsuperscript{27} With the promulgation of the Council Regulation (EC) No 40/94,\textsuperscript{28} graphical representation became a requirement for the Community trade mark.\textsuperscript{29} The OHIM examiner did not allow the ‘smell of freshly cut grass’ for tennis ball to be registered as a scent mark, because he did not consider these words to be a graphical representation. However, in 2000, the Second Board of Appeal \textit{de facto} accepted the reasoning of the Benelux Trade Mark Office, that the description was sufficiently clear for the registration of a Community trade mark for tennis balls. According to the Second Board of Appeal the ‘The smell of freshly cut grass is a distinct smell which

\begin{itemize}
\item Scent marks are registered in the US, including for fragrances such as: apple cider, bubble gum, cherry, coconut, grapefruit, grapes, lavender, oranges, peach, peppermint, piña colada, strawberry and vanilla. See Sieckmann, extract from ATMOSS, OAMI online, CVRIA online, Le Marketing Olfactif, IPONZ online, TARR database 2015, available at: 
\item \textit{Qualitex Co. v Jacobson Products Co.}, 514 U.S. 159 (1995) 162.
\item UK Trade mark, ‘strong smell of beer’, No. 2000234, Class 28, Unicorn Products, registered in 1996, above n 20.
\item UK Trade mark, ‘fragrance of roses’, No. 2001416, Class 12, Dunlop Tyres, Inc., 1996, lapsed 2014 (not renewed), ibid.
\item Article 1 Uniform Benelux Law on Marks (amended by the Protocol of November 10, 1983, amending the Uniform Benelux Law on Trademarks and by the Protocol of 2 December 1992, amending the Uniform Benelux Law on Marks) and repealed in 2006. Entry into force: 1 January 1996.
\item Article 2.1(1) Benelux Convention on Intellectual Property
\item Article 4 Regulation, ibid.
everyone immediately recognises from experience, and was satisfied that the description provided for the scent mark sought to be registered for tennis balls is appropriate and complies with the graphical representation requirement of Article 4 Regulation.

However, an article in OAMI News stated that notwithstanding the grant of the ‘smell of fresh cut grass’ Community trade mark, the future practice of OHIM would continue to demand a two-dimensional graphical representation of all non-verbal marks as a condition of application. Looking back, this raising of the registrability standard for non-traditional trade marks was just a prelude to the Sieckmann requirements.

**Sieckmann case**

Below the relevant arguments of the seminal Sieckmann case are analysed. Dr Ralf Sieckmann applied for a scent mark at the German Patent and Trade Mark Office, for the services in Classes 35, 41 and 42 (e.g. advertising, education, and providing of food or drink, respectively) of the Nice Classification. Dr Sieckmann wrote down the scent as a chemical formula, described the scent in words and deposited a sample. The Trade Marks Department Class 35, of the German Federal Patents Court rejected the application based on two grounds: an alleged lack of distinctiveness and a lack of graphical representation. The German Law on the Protection of Trade Marks and other Identification Marks (Markengesetz) 1994 implemented the requirements of Article 2 Directive and split them into two paragraphs: The distinctiveness requirement, which can be found in Paragraph 3 Markengesetz, and the graphical representation requirement, which can be found in Paragraph 8(1) Markengesetz. Paragraph 8(1) Markengesetz:

> Signs eligible for protection as trade marks within the meaning of Paragraph 3 Markengesetz which are not capable of being represented graphically shall not be registered.

Sieckmann appealed. The Appeals court held that in theory scents may be capable of distinguishing the goods of one undertaking from those of another, but it had doubts as to whether a scent mark can satisfy the condition of graphic representability under Article 2 Directive. Therefore it asked the following preliminary questions to the ECJ:

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31 See above, n 28.

32 OAMI News, No 3, 1999, at 4, as mentioned in AG Ruiz-Jarabo Colomer’s Opinion, above, n12, para 44. OAMI stands for Oficina de Armonizacion del Mercado Interior, which is OHIM in Spanish.

33 See above, n 9.

34 Ibid., para 10.

35 Nice Agreement on the International Classification of Goods and Services for the Purposes of the Registration of Marks of 15 June 1957, as revised and amended.

36 The olfactory mark consisted in the pure chemical substance methyl cinnamate (= cinnamic acid methyl ester), whose structural formula is C6H5-CH = CHCOOCH3, above, n 3, para 11.

37 ‘a balsamically fruity scent with a slight hint of cinnamon’. Ibid., para 13.

38 See above, n 12, para 12.

39 See above, n 22.

40 Ibid.
(1) Is Article 2 of the Directive to be interpreted as meaning that the expression ‘signs capable of being represented graphically’ covers only this signs which can be reproduced directly in their visible form or is it also to be construed as meaning signs - such as odours or sounds - which cannot be perceived visually per se but can be reproduced indirectly using certain aids?
(2) If the first question is answered in terms of a broad interpretation, are the requirements of graphic representability set out in Article 2 satisfied where an odour is reproduced
(a) by a chemical formula;
(b) by a description;
(c) by means of a deposit; or
(d) by a combination of the abovementioned surrogate reproductions?

Although the Preliminary ruling was about the interpretation of Article 2 Directive,\(^{41}\) because of its similarity to Article 4 Regulation, the case had implications for both systems.\(^{42}\) Answer 1 of the ECJ: The definition of a trade mark, see Article 2 Directive, is a non-exhaustive list. Therefore it must be interpreted as meaning that a trade mark may consist of a sign which is not in itself capable of being perceived visually, provided that it can be represented graphically.\(^{43}\) Answer 2 of the ECJ: Provided that the trade mark can be represented graphically, particularly by means of images, lines or characters, the representation must be clear, precise, self-contained, easily accessible, intelligible, durable and objective.\(^{44}\)

**Second Coming of Scent Marks**
The reform of the trade mark system, by removing the graphical representation requirement,\(^{45}\) will kiss the registration of non-traditional trade marks back to life, to begin with sound marks. Assessing the available paths of registration,\(^{46}\) which are linked to the advances of scent emitting technology, it becomes clear that scent marks inevitably will make their come-back in the EU. However an era of blooming scent marks in the EU is contingent on the development of an international classification system for scent marks, similar to the Vienna Convention for figurative marks.\(^{47}\) Those who have to design such a classification system can take a look at the ‘Perfumery Radar’ classification system for perfumes,\(^{48}\) and the international Panthone or RAL colour codes for inspiration.

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\(^{41}\) Ibid.
\(^{42}\) See above, n 3, para. 37.
\(^{43}\) Ibid., para 46.
\(^{44}\) Ibid., para 55.
\(^{45}\) See below, Part III.
\(^{46}\) See below, Part IV.
\(^{47}\) International Classification of the Figurative Elements of Marks under the Vienna Convention, 12 June 1973, WIPO, in its 7th edition.
\(^{48}\) Perfumery Radar was developed in 2010. It uses Gas Chromatography/Mass Spectrometry (see below, Part IV) to analyse parfumes and to classify them along the following axes: citrus, fruity, floral, green, herbaceous, musk, oriental and woody. Ben Coxworth, ‘Perfumery radar objectively quantifies scents’, Gizmag (3 December 2010) available at: \url{http://www.gizmag.com/perfumery-radar-objectively-quantifies-scents/17169/} (accessed 29 June 2015).
Part III Removing the Graphical Representation Requirement

This Section discusses the highlights of the events that lead up to the removal of the graphical representation requirement from the Articles that provide the definition of a trade mark in the Directive and Regulation. It also analyses these Articles and the relevant Preparatory Recitals in the Directive and Regulation. First the invitation to tender a study to assess the overall functioning of the EU trade mark system by the European Commission will be discussed, followed by the recommendations of the study done by the Max Planck Institute, and several drafts by the European Commission and European Parliament crystallising into the Final Presidency Compromise Proposal. Then, the Section will discuss, the remaining Sieckmann requirements; ‘clear, precise, self-contained, easily accessible, intelligible, durable and objective’, that made their way into the draft Direction and Regulation, and their continuing relevancy in order to guarantee or increase legal certainty of the representation of trade marks.

Study
The European Commission realised that the EU trade mark system was in need for reform and invited research institutions to tender for a study to come up with recommendations. From the questions that had to be answered about graphical representability it becomes clear that the European Commission had doubts about its relevance in regard to the registration of non-traditional trade marks. About the definition of signs of which a trade mark may consist it asked:

To what extent is the required capability of being represented graphically still a relevant and appropriate requirement for a sign to qualify as a trade mark with regard to non-traditional trade marks? What could be appropriate alternative requirements to establish instead of it?

The Max Planck Institute was awarded the contract in November 2009. The Max Planck Study concluded that ‘the requirement of graphical representation should be deleted’ from the wording

49 21 April 2015 a provisional agreement with European Parliament representatives on the reform of the European trade mark system, subject to confirmation by the Committee of Permanent Representatives of the Council.
50 See above, n 5.
51 See above, n 9.
52 Invitation to tender n° MARKT/2009/12/D: Study on the Overall Functioning of the Trade Mark System in Europe (22 July 2009).
53 One can argue that the first question was a leading question. A more neutral question would have been: What is/are relevant representability requirement(s) for a sign to qualify as a trade mark with regard to non-traditional trade marks?
54 Ibid., 23-24.
56 The phrase ‘the requirement of graphical representation should be deleted’ is literally copied into Recital 9 draft Regulation, above n 7. The Max Planck Study recommended to delete the requirement from the relevant provisions.
of the relevant provisions, so as to not bar the option for developing of new ways of representation which may be equally informative and reliable. However, this should not detract from the level of legal security prescribed in the ECJ’s *Sieckmann* judgment.\(^5^7\) The latter sentence does not necessarily mean that the remaining *Sieckmann* criteria\(^5^8\) need to be upheld, rather that the level of legal security prescribed in *Sieckmann* should be maintained. However, the study argued that the basic concept underlying the list of criteria enunciated in *Sieckmann* should not be dispensed: ‘Whereas they do not have to be repeated literally, those principles should be expressed in the law in a general form.’\(^5^9\)

**Phrasing a new Directive and Regulation**

On 21 April 2015 the EU presidency reached a provisional agreement with MEPs on the reform of the European trade mark system, subject to confirmation by the Committee of Permanent Representatives of the Council.\(^6^0\) After reading the final compromise proposals, and the previous proposals for amendments by the European Commission, Members of European Parliament, and Presidency, it becomes clear that Article 3 Directive and Recital 13 Directive, and also Article 4 Regulation and Recital 9 Regulation,\(^6^1\) have completely crystallised, because they did not change at all during the last three presidency compromise proposals.

**Article 3 draft Directive.**\(^6^2\)

*Signs of Which a Trade Mark May Consist*

A trade mark may consist of any signs, in particular words, including personal names, designs, letters, numerals, colours, the shape of goods or of their packaging, or sounds, provided that such signs are capable of:

(a) distinguishing the goods or services of one undertaking from those of other undertakings; and

(b) being represented on 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.

**Recital 13 Directive (replaces the old Recital 8 Directive):**

To this end, it is necessary to list examples of signs which may constitute a trade mark, provided that such signs are capable of

\(^{57}\) Ibid., 264, para 59. Although a Recital is not a provision the phrasing looks awkward. One should rather expect to find it in the Directive as an exhortation for the EU member states to remove the requirement from their legislations. Then again, ‘Recitals set out the reasons for the contents of the enacting terms (i.e. the articles) of an act’, according to the 2.2(b) Interinstitutional Guideline, available at: http://publications.europa.eu/code/en/en-120200.htm (accessed 29 June 2015), and at least it shows how the absence of the graphical representation requirement in Article 4 Regulation came about.

\(^{58}\) See above, n 55, 264.

\(^{59}\) See above, n 3.

\(^{60}\) See above, n 55, 67.


\(^{62}\) Analysis of the final compromise texts with a view to agreement, above n 5.
distinguishing the goods or services of one undertaking from those of other undertakings. In order to fulfil the objectives of the registration system for trade marks, which are to ensure legal certainty and sound administration, it is also essential to require that the sign is capable of being represented in a manner which is clear, precise, self-contained, easily accessible, intelligible, durable and objective. A sign should therefore be permitted to be represented in any appropriate form using generally available technology, and thus not necessarily by graphic means, as long as the representation offers satisfactory guarantees to that effect.

Article 4 draft Regulation:63

Signs of which a European Union trade mark may consist
A European Union trade mark may consist of any signs, in particular words, including personal names, designs, letters, numerals, colours, the shape of goods or of their packaging, or sounds, provided that such signs are capable of:
(a) distinguishing the goods or services of one undertaking from those of other undertakings; and
(b) being represented on the Register of European Union trade marks, hereinafter ‘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;

Recital 9 draft Regulation:
In order to allow for more flexibility while ensuring greater legal certainty with regard to the means of representation of trade marks, the requirement of graphic representability should be deleted from the definition of a European Union trade mark. A sign should be permitted to be represented in any appropriate form using generally available technology, and thus not necessarily by graphic means, as long as the representation is clear, precise, self-contained, easily accessible, intelligible, durable and objective.

Analysis Definitions
The drafts of Article 3 Directive and 4 Regulation provide a definition of what could be a trade mark. Both articles divide the distinctiveness and representability requirements in two paragraphs (a) and (b), respectively. In the introduction of Articles 3 draft Regulation and 4 draft Directive, which provide non-exhaustive lists of possible national and EU trade marks,64 ‘colours’ and ‘sounds’ are added. This suggests that these non-traditional trade marks have become traditional. Proposals to expand the non-exhaustive lists further with more obvious examples such as patterns

63 Ibid.
64 The name Community trade mark has been replaced by EU trade mark, above, n 5.
and logos\(^{65}\), or models, motifs, devices and logos\(^{66}\) were not adopted. Articles 3(b) draft Directive and 4(b) draft Regulation are almost identical: ‘being represented in a manner which enables the competent authorities and the public to determine the precise subject of the protection afforded to its proprietor.’ Of course, where the Directive is dealing with the register, the Regulation is dealing with the Register of the EU trade marks.

**Analysis Recitals**

Recitals 13 draft Directive and 9 draft Regulation\(^{67}\) cover representability, but there are some interesting differences: the objective of the amendment of the Regulation is to provide ‘more flexibility while ensuring greater legal certainty’, while the amendment of the Directive is ‘to ensure legal certainty and sound administration.’ The difference in wording is understandable, since the national trade mark offices provide varying levels of legal certainty and administrative efficacy and efficiency.\(^{68}\) The draft Regulation states that the ‘graphical’ representability requirement needs to be deleted from the definition of an EU trade mark, but paradoxically leaving it there. This might be to point expressly to its undesirability. The call to delete ‘graphical’ from the representability requirement is absent in the draft Directive, suggesting that the national trade mark offices can leave the graphical representability requirement intact in their legislations, for now.

Both Recital 13 draft Directive and Recital 9 draft Regulation state that a sign should be permitted to be represented in any appropriate form using generally available technology, and thus not necessarily by graphic means.\(^{69}\) The proposal to require ‘freely available technology’ was not adopted.\(^{70}\) One can question which technology is truly freely available. Affordable technology for the trade mark proprietors might be a more realistic criteria that was not proposed. In the Section below\(^{71}\), the relevancy of affordable technology becomes clear.

Both draft Recitals 13 Directive and 9 Regulation prescribe the remaining *Sieckmann standard*\(^{72}\) of representability: clear, precise, self-contained, easily accessible, intelligible, durable and objective.\(^{73}\)

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\(^{65}\) Evelyn Regner MEP (Amendment 61, 31 October 2013, at 14; Amendment 98, 31 October 2013, at 19-20).


\(^{67}\) See above, n 5.

\(^{68}\) The agreement to amend the Regulation and Directive is trying to improve the cooperation of OHIM with the national trade mark offices. This cooperation left room for improvement, according to the *Max Planck Study*, above, n 55 at 251 et seq.


\(^{70}\) Marielle Gallo MEP, Amendment 42 Directive, 31 October 2013, at 3-4; and Amendment 73 Regulation, 31 October 2013, 4.

\(^{71}\) Part IV.

\(^{72}\) See above, n 9.

\(^{73}\) Ibid.
Part IV Pathways to Representability

The remaining representability requirements, spared from its inhibitive graphical representation requirement, open the door for sound marks. Sound marks were given honourable mention in the non-exhaustive list of what defines a trade mark in the drafts for the Directive and Regulation.\textsuperscript{74} And both the Max Planck Study\textsuperscript{75} and OHIM already gave their blessings over the representability of sound marks by means of the deposits of sound files.\textsuperscript{76} A similar technology using digital files for scents in combination with a scent printer might be the most promising if it can comply to the remaining \textit{Sieckmann} requirements using ‘generally available technology’,\textsuperscript{77} that is, ideally, affordable as well. Below, first an assessment is made of available methods of registrability for scent marks: description in words, chemical formulae, identifying of the scent, physical or digital deposits. Then, the most promising of these methods, digital deposits, will be scrutinized in regard of the remaining \textit{Sieckmann} requirements.\textsuperscript{78}

Description in words
The argument against the description of a scent is that there is a discrepancy between the words and the scent. In other words that this method is not clear and precise enough and not sufficiently objective.\textsuperscript{79} However, one can argue that the description of universally known fragrances, such as particular fruit or ‘freshly cut grass’ is highly objective. One can argue that even variations in perception that meet the description fall within the scope of the protection, just as the case is with colour marks. To avoid confusion, the colour mark of, for example Christian Louboutin, protects it against any shade of red used by competitors if they use it on the outsole of women’s shoes. The same applies for scent marks: for example Senta Aromic Marketing’s, a company that registered the scent mark described by the words ‘the smell of fresh cut grass’ should be able to protect its brand of tennis balls against any competitor that adds a smell related to grass to its tennis balls, because that leads to a likelihood of confusion.

Identifying compounds
Another method is analysing the compounds of a scent,\textsuperscript{80} using Gas Chromatography Mass Spectrometry (GC/MS) analysis. This process separates the volatile constituents in a gas (gas chromatography) and then identifies each of these compounds by their distinctive mass. Unfortunately, GC/MS analysis is less than perfect: there can be problems with the separation of

\textsuperscript{74} Article 3 Directive, Article 4 Regulation, ibid
\textsuperscript{75} ‘Furthermore, in cases such as musical tunes and sound marks, representation by other than graphical means (e.g. by sound recordings) may even be preferable to mere graphical representation, if it allows for a more precise identification of the mark and thereby serves the aim of enhanced legal certainty.’ See above n 55, 67.
\textsuperscript{76} The “representation by other than graphical means (e.g. by a sound file) may even be preferable to graphic representation, if it permits a more precise identification of the mark and thereby serves the aim of enhanced legal certainty.” Proposal for a Regulation of the European Parliament and of the Council amending Council Regulation (EC) No 207/2009 on the Community trade mark, 8065/13, 2 April 2013, 7.
\textsuperscript{77} See above, n 69.
\textsuperscript{78} See above, n 9.
\textsuperscript{79} See above, n 12, para 41. See above n 3, para 65.
\textsuperscript{80} See above, n 48.
the constituents, or constituents are not detected.\textsuperscript{81} A practical problem could be that the GC/MS equipment is expensive. However, it is imaginable that trade mark proprietors make use of a GC/MS service so that they do not have to invest in the expensive equipment themselves,\textsuperscript{82} and subsequently are able to send the results to the EU Intellectual Property Office, who can share it with the public in a database which makes use of a practical classification system.\textsuperscript{83}

Chemical formulae
A chemical formula represents not the scent of a substance, but the substance itself,\textsuperscript{84} which is emitting one or more volatilized chemical compounds that can be perceived as a scent.

Availability of the fragrance, physical and digital deposits
Sieckmann argued that for pure chemicals having a defined, constant low-volatile odour characteristic, the availability in normal quantities from local laboratory suppliers or manufacturers and distributors of fine organic chemicals should play a factor in addition to a physical deposit.\textsuperscript{85}

To physically deposit a fragrance would be burdensome for the public, competent authorities and the applicant. An extra challenge would be the volatility of the constituents of scents over time.\textsuperscript{86} In light of the duration of a mark's registration,\textsuperscript{87} one could imagine that every time the trade mark is renewed, a fresh sample is to be deposited, so that within these intervals the scent will be stable. The drawback of this method is that it is even more laborious and bothersome than depositing it one time.

The \textit{Max Planck Study},\textsuperscript{88} and the EU trade mark system reform gave the green light to deposits of digital sound files. However, scents can also be encoded into a digital file. The applicant can send such a digital file via the internet to the trade mark office, who can store, examine and publish it. The public, including competitors, can download the digital file from the trade mark office’s database. They can then transform the digital file into a scent again by making use of a scent printer. Scent printers can emit scents after decoding the digital file. Scent printers have been around since the 1950s,\textsuperscript{89} but only recently scent related technology has converged with the internet and passed a threshold that can make it relevant for scent marks. In 1999 the University of Huelva, in Spain,

\begin{thebibliography}{99}
\addcontentsline{toc}{section}{References}

\bibitem{82} Once the scent print is made, it can be send to the trade mark office and digitally accessed via a database. How this scent print database will be categorised could be a challenge.

\bibitem{83} Classification system is crucial.

\bibitem{84} See above, n 12, para 40.

\bibitem{85} See above, n 3, para 27.

\bibitem{86} Ibid., para 42. See also above, n 3, para 67.

\bibitem{87} See above, n 3 para 53.

\bibitem{88} See above, n 55, para 67.

\bibitem{89} AromaRama and Scent-O-Vision were two failed experiments to add scent to cinema. Problem was that the smells stayed too long and then mixed. However, Kenichi Okada of Keio University in Tokyo developed an ink-jet printer whereby the smell dissipates within two human breaths, and was trying to sync them with pictures. Amanda Kooser, ‘Japanese scientists create Smell-O-Vision screen’ CNET (2 April 2014) available at: http://www.cnet.com/news/japanese-scientists-create-smell-o-vision-screen/ (accessed 29 June 2015).
\end{thebibliography}
developed an XML Smell language, a protocol to transmit scent files via the internet, and in 2014 a Harvard University professor and his students developed the oPhone, an affordable gadget that emits 32 scents, which can be combined into more than 300,000 scents. Just as the image resolution of digital cameras has exponentially improved over the years, and the price per mega pixel has dropped, it is very probable that scent printers will be able to emit more scents for an ever decreasing price per scent. Scent printers have not yet reached the upper threshold of scents human beings can detect, so there is room for expansion in the spectrum of scents they can offer.

**Digital files of scents and Sieckmann**

Below, the method of sending, storing and retrieving digital scent files in combination with a scent printer, is assessed in light of the remaining Sieckmann requirements. According to the remaining Sieckmann requirements, the public and the competent authorities should be able to know clearly and precisely what scent the applicant wants to represent. A semiotic analysis can deconstruct the scent mark into signifier (the particular scent), signified (goodwill) and referent (the product or service to which the scent mark is affixed). At first it seems that the signified and referent dimensions are irrelevant for the assessment of the clear and precise representability of the scent. However, *Eden SARL v OHIM*, makes clear that this is not the case. The question was whether the ‘smell of ripe strawberries’ is unique and unequivocal in respect to all varieties. In other words what are the boundaries of the scent? One should realise that the scope of the protection of a trade mark is interdependent to the scope of the infringement of a trade mark. Therefore, the question should be whether another strawberry-like scent would confuse the public: therefore the particular product or service (referent) and the goodwill built up in the sign becomes crucial.

Can the representation of a scent be self-contained? It depends on how one interprets self-contained: any digital file, whether they encode sounds or scents, needs a digital device to store it, the internet to transport it and a gadget that can play the sound or emit the scents in a linear way.

The representation of scents needs to be easily accessible. That everyone with an internet connection, one of the ubiquitous digital devices and an affordable scent emitting gadget can have access to the scent database is not sufficient: Professor Cohen Jehoram rightly pointed to the lack of an internationally recognised classification system for scents, which is equally crucial of easy access.

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93 See above, n 9.
94 Ibid.
95 See above, n 3, para 49-50.
98 Ibid., para 32.
99 Above n 3, para 51.
100 Tobias Cohen Jehoram, 119. See above, n 97, para 34.
The representation also needs to be understood by the public and competent authorities. The ECJ held a very low standard for intelligibility in case of the representability of music notation.\textsuperscript{101} To actually smell a representation of a scent is both intelligible and intuitive. It is preferable over the use of one sense to try to represent another sense, which is really an art form, best left to perfumers, sommeliers and flavourists. As scent printers evolve and be able to further perfect the emittance of scents, the gap between representation of the scents and the scent itself becomes insignificant. It is conceivable that only those scents can be registered as trade mark that can be emitted via a scent printer and whose representational value coincides with the scent itself. Digital files are code that are not negatively influenced by concentration, quantity, temperature or substance bearing the scent.

The ECJ in \textit{Sieckmann} argued that the object of representation is to specifically avoid any element of subjectivity.\textsuperscript{102} However, just as any of the human senses, scent might be perceived differently by different people, based on their cultural backgrounds and sensorial experiences.\textsuperscript{103} In \textit{Eden SARL v OHIM} the applicant rightly submitted that 'a sign has to be capable only of distinguishing the goods which it designates and that, for a mark to fulfil its function, it is sufficient that it is perceived as a mark by people.'\textsuperscript{104}

\section*{Part V Conclusion}

The graphical representation requirement was considered outdated,\textsuperscript{105} and part of ‘obvious historical leftovers’.\textsuperscript{106} The \textit{Max Planck Study} recommended to delete it from the definitions in the Directive and Regulation,\textsuperscript{107} which was followed up by their actual removal in the drafts of the Directive and Regulation. These provisions can be praised for their technology and method neutrality, which is conducive to innovation. In principle each mode of representability is allowed as long as it complies with the remaining \textit{Sieckmann} requirements for representability ‘clear and precise, self-contained, easily accessible, intelligible, durable and objective’,\textsuperscript{108} which are still relevant. Instead of a boundless extension of admissible ways to represent a sign, the EU legislators wanted to provide for more flexibility while ensuring greater legal certainty. The national trade

\begin{footnotesize}
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\item[\textsuperscript{101}] The ECJ in \textit{Shield Mark BV v Joost Kist}, which is post-\textit{Sieckmann}, held already a rather low standard of intelligibility in regard to musical notation with a stave in bars, clef and musical notes, “even if such a representation is not immediately intelligible, the fact remains that it may be easily intelligible, thus allowing the competent authorities and the public, in particular traders, to know precisely the sign whose registration as a trade mark is sought.” Judgment of the Court (Sixth Chamber) of 27 November 2003 \textit{Shield Mark BV v Joost Kist} (C-283/01, EU:C:2003:641) para 63.
\item[\textsuperscript{102}] See above, n 3, para 54.
\item[\textsuperscript{103}] In contrast, Mezulanik argued that “[S]cent marks are more problematic than visual marks as they are defined subjectively and therefore open to interpretation.” Eleni Mezulanik, ‘The Status of Scents as Trademarks: An International Perspective’ \textit{67}(1) INTA BUL. (1 January 2012).
\item[\textsuperscript{104}] See above, n 97, para 15.
\item[\textsuperscript{105}] A broad majority of trade mark associations expressed the view that the requirement of graphical representation of signs was outdated, above n 55, 66, para 2.9.
\item[\textsuperscript{107}] See above, n 55, 264, para 59.
\item[\textsuperscript{108}] See above, n 9.
\end{enumerate}
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mark offices could experiment with different ways of registration, so that the most effective ways of application/registration that guarantee legal certainty can be found and shared in the context of enhanced cooperation between the national trade mark offices and the EU Intellectual Property Office. The latter could then provide application guidelines of which the most successful can be implemented throughout the EU.

The inclusion of colour and sound marks in the trade mark definitions of Articles 3 Directive and 4 Regulation can be interpreted as that they have joined the lists of traditional trade marks. The EU Intellectual Property Office has already alluded that it would welcome the method of representation of sound files. This implies that digital files for sounds meet the remaining Sieckmann requirements for representability. Because scent marks can also be represented with comparable technology using digital files, the internet and a play gadget, the ‘emancipation’ of scents into the group of sensorial trade marks that are registrable in the EU seems inevitable.