



VALUABLE YET VULNERABLE:

TRADE SECRETS IN
THE FRAGRANCE INDUSTRY

"In light of the current patchwork of legislation, it is urgent that the place of trade secrets be finally recognised within the IP regime of the EU, and that uniform sanctions are applied throughout Europe against their violation. Trade secrets are as important as patents for the protection of industrial innovation. We must avoid a new haemorrhage of European industrial innovation and protect SMEs which are most vulnerable."

(Extract from the press release by the MEPs, Françoise GROSSETETE, Marielle GALLO and Gaston FRANCO, on the occasion of IFRA's exhibition "A Sense of Europe" at the European Parliament, 31 Jan – 2 Feb 2012.)

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PREFACE

The fragrance industry is one that has innovated throughout its long history and which depends on protecting its intellectual property for survival. As a platform technology business, it supports a great number of jobs both in Europe and around the world.

Trade secrets have been the principle means by which our rapidly innovating industry has historically protected its intellectual property. The following report is designed to highlight its continued dependence on trade secrets as a means of protecting the fragrance industry's IP, the challenges to the continued effective use of trade secrets and to indicate where our industry would like to see action in this area. We have, where possible, illustrated with examples.

We trust that the European Commission will find this contribution to be of value and we stand ready to provide additional information should the Commission judge this beneficial in the context of its policy development in this area.

Pierre Sivac, President IFRA

1 - INTRODUCTION

Products of the fragrance industry, like those of other high-technology industries, are valuable as a result of intellectual effort invested in their creation. This is an industry which holds the secrets to some of the world's most iconic products and which also produces some **5-6,000 new proprietary blends each year**. The industry sees trade secrets as an essential means for the protection of knowledge, R&D, insights, expertise, know-how and investment that support the new and classic fragrance blends.

In 2011, the Commission initiated a study on the significance of trade secrets and confidential business information in the internal market.¹ IFRA has prepared this report to complement contributions of individual fragrance companies to the study and to offer to the Commission and key stakeholders a comprehensive perspective on the importance of trade secrets on behalf of all participants in the European fragrance industry.

This report provides information on the socio-economic impact of the fragrance industry, the manner in which trade secrets protection underpins its business model and the likely consequences of weak protection. The paper explains, with illustrations, how it relies on trade secrets versus other forms of IP protection. The challenges the industry faces in protecting its trade secrets are discussed. The report concludes with recommendations on steps the Commission might consider in crafting more effective trade secret protection for this quintessentially European industry.

¹ The law firm Baker & McKenzie (Milan) was commissioned to prepare this report that is now underway.

2 - THE SOCIO-ECONOMIC IMPACT OF THE FRAGRANCE INDUSTRY²

2.1 - Market Breakdown & Employment

Companies operating in the fragrance industry in general create fragrance compositions (scents) and source and or develop raw materials for the production of proprietary blends. These are incorporated into hundreds of thousands of products mainly within three market segments: household products and detergents (50%); personal care products (30%); and fine fragrances (20%).

To meet the demand for original fragrances to be incorporated into both new and existing products downstream, the fragrance industry innovates constantly. Fragrance houses typically invest between 1.6-1.8% of annual turnover in R&D to remain competitive in a market insatiable for new products.

Europe remains the largest market for fragrances, and also the world's leading net exporter of cosmetics and fine fragrances that depend heavily on the technologies and products of the fragrance industry.

2.2 - The Fragrance Value Chain

Wealth and employment, along with other public benefits, are created because ideas and technologies are embedded in more complex products and services, adding value at each stage of the value chain. This economic activity sustains jobs and wealth directly and **indirectly**. Using a conservative approach i.e. the "narrow value chain" the fragrance industry generates close to 1 million jobs and a gross value added (GVA) of EUR 51 billion in the EU alone.

Innovation drives the fragrance value chain. Investments in intangible assets by fragrance companies, utilised in partnership with brand owners, provide one of the principal means for achieving continuous innovation in markets with more than EUR 140 billion of annual consumer spending³. Fragrance technologies facilitate different types of innovation, including creating new consumer markets; refreshing existing, mature consumer markets; and, facilitating the development of new store and non-store retail formats.

² The Socio-Economic Impact of Fragrance Technologies in Europe (September 2012, The Huggard Consulting Group).

³ Expenditure by ordinary households includes gross output VAT charged on retail goods and services.

3 - PROTECTING INNOVATION AND INTANGIBLE ASSETS⁴

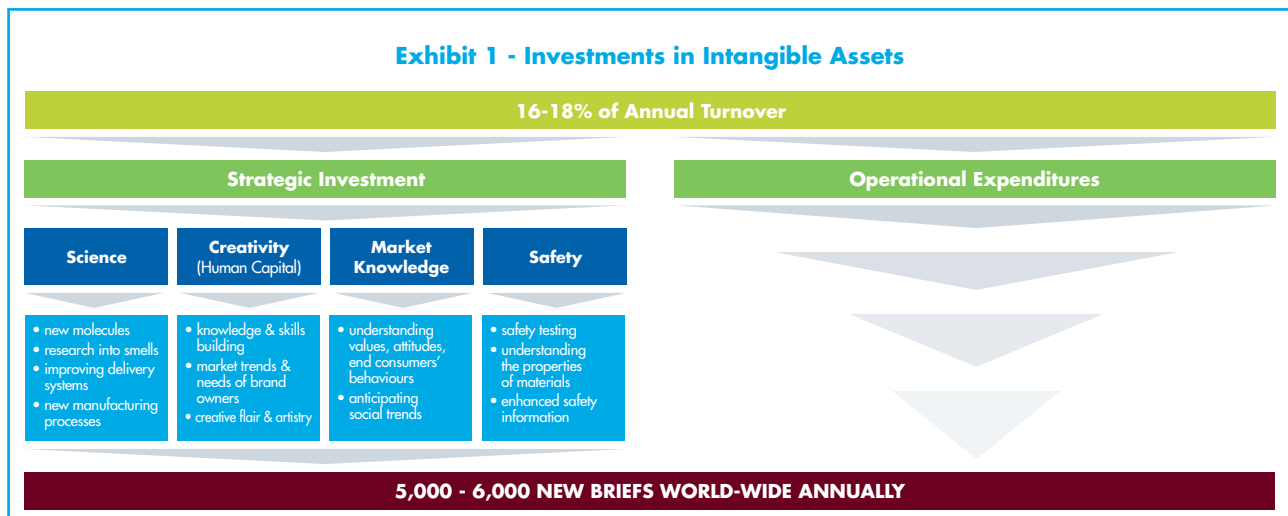
3.1 - Fragrance Industry Business Model

Specialist suppliers of proprietary blended fragrances focus on long-term investments in intangible assets designed to support continuous product innovation based on creativity and technology. Innovations often imply intellectual property, facilitating the flow of capital to fund further investment and innovation, providing brand owners with unique market benefits.

Fragrance companies invest in the development of long-term assets and in funding project activities in advance of receiving payment from brand owners. The costs of investments and product development can only be recovered through regular purchases

of the blend of materials, *if* the fragrance wins the competition to be used in the new product and *if* this product is then successful in the market. To ensure that the fragrance company benefits fully from this and hence is able to recover the costs of investment in innovation, the unique fragrance needs to be protected as an intangible asset, owned by the fragrance company.

Product innovation by the Fragrance industry encompasses two types of expenditure which are illustrated below (Exhibit 1). Fragrance companies use these assets, and operational resources, to generate a continuous flow of unique proprietary fragrance blends.



⁴The Socio-Economic Impact of Fragrance Technologies in Europe (September 2012, The Huggard Consulting Group)

3.2 - The Importance of Protecting IP

A robust intellectual property protection framework for new fragrance formulations creates four distinct economic benefits:

- First, it enables providers of capital to share in the on-going benefits of market success of consumer and luxury brands that make use of fragrance technologies, providing a means of recovering the investment in intangible assets;
- Second, it creates a form of additional intangible asset (the capitalised value of expected cash flows from the use of unique fragrances) that can be separated from other assets, providing investors with a way of valuing investments;
- Third, it enables brand owners to make unique offers to end users, creating periods of relative competitive advantage and opportunities to add value; and,
- Finally, it creates incentives for brand owners to pay for the innovative activities of fragrance companies and to respect their intellectual property.

3.3 - Loss of IP – Likely Outcomes

Weak intellectual property protection of fragrances will seriously damage one of the primary “engines of innovation” supporting the consumer goods and luxury goods industries because it will lead to a dramatic reduction in innovation by the fragrance industry. This would trigger a restructuring from the modern creative fragrance industry that we see today to one that focuses on low cost production of a narrow range of established fragrances with limited product innovation. This would also shift the focus of production of fragrances away from the EU into locations with lower labour costs. This is likely to occur because:

- Providers of capital, unable to protect their investments, will reduce dramatically the availability of new resources for innovation.
- Human capital, the principle source of creativity, is likely to leave the fragrance industry, destroying one of its major intangible assets.
- Revenues from existing fragrances would be eroded as brand owners, no longer able to gain unique benefit from fragrances would seek to minimise their costs.
- Companies, focusing on costs over innovation, would likely cease production of low volume fragrances, reducing the range of fragrances available to user industries.
- In this environment, small fragrance specialists (SMEs) are likely to find it difficult to survive.

4 - THE EVOLVING ROLE OF TRADE SECRETS IN THE FRAGRANCE INDUSTRY IN EUROPE

4.1 - Historical Role of Trade Secrets in the Fragrance Industry

Historically, intellectual property within the fragrance industry has been protected by keeping confidential the formulations of specific fragrances. Documented trade secrets like formulae were kept under lock and

key, and were available only to a small group of individuals. These practical measures were effective when the fragrance industry was comprised almost entirely of small firms – often family businesses – with employees typically spending their entire careers at one location and one firm.

Exhibit 2 - Not only perfumes...

In the early 18th Century in Meissen Johann Böttger discovered the technique of making porcelain. He did so through persistent experimentation; not by means of a trade secret leaked to him by a disloyal porcelain maker in China – previously the only country possessing this valuable information.

Immediately following his discovery Böttger moved operations to Albrechtsburg Castle, high on a hill above Meissen, to protect the secret of his discovery. This practical precaution, along with loyal workers, allowed Meissen Porcelain to develop over three centuries into one of the finest porcelain makers in Europe still thriving today.

The structure of the fragrance industry has changed significantly over time. The presence of vibrant SMEs is a characteristic of this industry. The importance of trade secrets to these SMEs is significant as they rely to a greater extent than large companies on know-how and experience.

The fragrance industry is characterised by a highly interdependent network of relationships among industry participants (e.g., suppliers, fragrance houses, perfumers and other employees, consumer brands). Given the increasingly rapid pace of product turnover in this ultra-competitive market, trade secrets are simultaneously more valuable to innovators and more vulnerable to misappropriation than previously.

4.2 - Trade Secrets in the Modern Fragrance Industry

Notwithstanding that existing trade secrets legislation varies among EU member states, it is universally understood that trade secrets are characterised by three essential elements:

- (1) The information (e.g., a formula, a method, a compilation) is not commonly known;
- (2) The information is commercially valuable in that it confers a competitive advantage to its owner;
- (3) The owner of the information has taken reasonable measures to keep it secret.

Large fragrance houses have resources to support in-house legal counsel accountable for identifying and protecting the company's intellectual property. SME's are particularly vulnerable to trade secret misappropriation because, unlike the larger fragrance houses, they lack the expertise and resources to protect their know-how on which they rely greatly (Exhibit 3). Often, SME's are not even aware of the commercial value of the proprietary information, and the advisability of keeping it secret.

Exhibit 3 - Small but Resourceful

Azur Fragrance, a small French fragrance company, won a brief from a major producer of consumer products for a new fabric softener. The challenge was the addition of citric acid, a pure crystal, only soluble in water, to an oily fragrance. Citric acid is a key component in the formulation for the product as it maintains acidity that prevents textile discoloration.

Whereas much larger competing fragrance houses only succeeded in incorporating citric acid at 0.1%, Azur achieved a concentration that was ten times higher (1%). Rather than applying contemporary technologies, the company used traditional know-how.

Frequently, a company, even a whole industry, may realise too late that it has not taken appropriate measures to protect valuable information. This company or industry is then vulnerable to new market players from aggressive emerging economies that use this unprotected unique know-how with few or no legal barriers or sanctions within the EU.

4.3 - Limitations of Other Forms of IP for the Fragrance Industry

While all types of IP protection are valuable to the fragrance industry, trade secrets remains the most practical and efficient means of protecting the intangible assets that is produced by day-to-day innovation. José Monteiro, legal counsel for L'Oréal, recently pointed out that "Trade secrets still play, without a doubt, a major role in the defence of a company's commercial position."⁵

⁵ Presentation held at the APRAM-MEDEF Meeting in Paris on 26 June 2012.

The following diagram (Exhibit4) illustrates the various types of fragrance industry IP and how they are currently protected within the fragrance industry.

Exhibit 4				
IP	Patents	Copyright	Trademark	Trade Secrecy
Molecules	✓		✓	✓
Processes	✓		✓	✓
Client lists				✓
Supplier lists				✓
Raw materials (stabilization, processing, sourcing)	✓			✓
Know how/Institutional knowledge				✓
Client product knowledge				✓
Market knowledge and surveys				✓
Logos, Brands and Images			✓	

The industry may use trademarks to protect its names and images. However, trademark is more pertinent for the clients of the fragrance industry to protect their retail brands.

Patents are generally used to protect newly discovered fragrance molecules and other significant inventions within the fragrance industry. However, they are not a practical means by which to protect the incremental innovations which attend and support

these discoveries. Patents are very costly in terms of both time and money and also involve the disclosure and eventual loss of valuable IP. Moreover, the time necessary to obtain a patent often exceeds the product life cycle of many new fragrances.

Exhibit 5 - "Fifteen Minutes of Fame"

"These are fragrances that are fast...when one fades, another comes out," said Linda Wells, the editor in chief of Allure. "It's almost like the release of albums or new movies... the idea is to hit the fragrance out at the peak of a celebrity's popularity and recognize that it's going to be short-lived, and you move on."

(Rachael Felder, "From Chanel No. 5 to Britney No. 11," New York Times, 6 Dec 2012)

The fragrance industry, particularly the SMEs, mostly rely on small, proprietary product refinements and production efficiencies, as well as know-how in specific areas such as raw material sourcing, storage and stabilisation for competitive advantage.

Exhibit 6 demonstrates how the respective roles of patents and attendant know-how can be used to add an additional layer of IP protection and hence generate a competitive advantage.

Exhibit 6 - Artful Patenting: The Extraordinary Cetalox®

Firmenich manufactures a molecule, Cetalox®, a substitute for ambergris, the rare secretions of sperm whales. Firmenich elected to patent only part of its proprietary Cetalox® synthesis process. Although the patent has expired, because of the limited disclosure, only very recently have competitors been capable of producing this compound.

The use of copyright to protect olfactory creations is currently unsettled in Europe. While IFRA will continue to examine its relevance, IFRA believes that

trade secret is a more pressing area of practical concern to the industry at this point.

4.4 - Beyond Formulae – The Expanded Role of Trade Secrets for the Fragrance Industry Today

For the layman, fragrance industry trade secrets are associated with the formulae of fine fragrances. In reality, trade secrets protect far more than formulae, including the origins and processing of natural materials (Exhibit 7), marketing plans, and availability of specific raw materials in light of short- and

long-term political and meteorological trends. It can also cover lists of clients, suppliers and consultants. Above all, trade secrets protect the incremental innovations in methods of production (e.g. encapsulation, delivery and colouration) that enable a company's products to remain competitive. Jean-Jacques Chanot, President of Mane refers to such information as "connaissance historique interne"⁶, or "institutional knowledge".

Exhibit 7 - More Than a Formula: Chanel No. 5

Jasmine absolute is a significant ingredient in Chanel No. 5, a top-selling perfume for nearly a century. To ensure an on-going supply of the finest jasmine absolute, Chanel maintains a close relationship with the last remaining jasmine farmer in Grasse. Chanel built an extraction facility immediately adjacent to this jasmine farm where it purchases and processes the entire harvest. No. 5's formula is valuable, but so is the symbiotic relationship, cultivated over many decades, between the raw materials supplier and the fragrance house.

Fragrance industry programs specifically devoted to R&D have been responsible for dramatic improvements in the form of new molecules and encapsulation, delivery and production methods.

Many improvements, however, have been the results of constant, incremental refinement of materials and processes across the industry (Exhibit 8).

Exhibit 8 - The Secret of Turning Yellow into Pink

A fragrance house was tasked with turning a yellow citrus-based perfume pink. To remove the yellow of the citrus blend, the company tried chemical colour removal, but this also removed the pink tint. It ultimately succeeded by the physical means of fractional distillation.

⁶ IFRA interview at Mane (Bar-sur-Loup) on 19 April 2012.

5 - CHALLENGES TO TRADE SECRET PROTECTION IN THE FRAGRANCE INDUSTRY

While many industries face challenges to trade secret protection and are seeking to address these challenges⁷, several recent trends in this area present particular problems for the fragrance industry.

5.1 - Reverse Engineering

Exhibit 9 - There Was a Time...

"We shall smell it. Just as a sharp axe can split a log into tiny splinters, our nose will fragment every detail of this perfume. (...) We'll scrupulously imitate his mixture, his fashionable perfume. It will be born anew in our hands, so perfectly copied that the humbug himself won't be able to tell it from his own. No! That's not enough! We shall improve on it! (...) Sharpen your nose and smell without sentimentality! Dissect the scent by the rules of the art! You must have the formula by this evening!"

Extract from "Perfume. The Story of a Murderer" (Patrick Süskind)

The relatively cheap availability of analytic technologies like gas chromatography-mass spectrometry now allow for very detailed analyses of fragrances. Using these latest techniques to support an experienced perfumer, a competitor can rapidly bring close approximations of the original to the market without having to recover the substantial R&D investment of the innovator. This reality was

illustrated by perfumer Bernard Chant when he publically divulged some of the key ingredients used in perfumes he created: "I am going to take the liberty of mentioning some key ingredients used in these creations. I feel that in the age of chromatography anyone can identify them, so I am not revealing any secrets."⁸

⁷ The Trade Secrets Innovation Coalition (TSIC), whose membership includes major EU and US corporations, was established to address the increasing trend of misappropriation of high-technology proprietary information from EU and US industries.

⁸ "The Challenge of Creativity", lecture given at the British Society of Perfumers, 11 November 1982.

5.2 - Demands for Disclosure and Transparency

Another challenge to the protection of fragrance industry trade secrets is the pressure for disclosure and transparency via regulation and public interest groups. IFRA's mission is to promote the creation and enjoyment of fragrances that are safe for humans and environmentally sound. To achieve this, it maintains a rigorous safety program to which IFRA members must adhere.

IFRA supports EU legislation that promotes consumer safety but believes that regulations that would require full disclosure of fragrance formulae or that would overly limit the list of usable ingredients, would provide no meaningful health benefit to consumers, and seriously damage the competitiveness of the European fragrance industry in the global market.

Increasingly, fragrance industry clients are demanding, on safety grounds, the formulae and related information on products supplied to them. This increases the risk that such clients will eventually formulate the fragrance themselves or to commission another house to recreate it at a lower price.

As for safety concerns that may drive disclosure demands, customers of IFRA-compliant houses can be confident that the fragrance compounds they purchase are created according to the strictest health standards.

5.3 - Electronic Information Storage and Transmission

Formulae and other valuable information of the fragrance industry once kept as paper records can now be stored digitally on small devices or

transmitted electronically. Regardless of precautions taken to limit access to such information, it is much easier to replicate and transmit electronic information than that which is in hardcopy and physically secured.

5.4 - New Employment Trends

The vulnerability to misappropriation of digital information is exacerbated by modern employment trends. Large fragrance houses now have thousands of employees, branch offices throughout the world and a highly mobile workforce. This geographical spread of the industry and the individual companies also creates the need to exchange information in electronic form. All this significantly increases the challenge of protecting such information.

5.5 - The European Trade Secret – A Legislative Patchwork

The level of protection afforded to trade secrets differs greatly throughout the EU. There are also significant differences in the ability to have that protection enforced as well as in obtaining compensation and redress for acts of misappropriation. In 2011, the Commission examined the legal protection of trade secrets in each of the twenty-seven member states.⁹ It confirmed that to the extent trade secrets were protected by EU nations, they were covered by a patchwork of inconsistent and at some times incompatible laws. While most member states have legislation addressing trade secrets, the protection offered by some of these laws is very limited. Weak trade secret legislation and enforcement in even one EU member state potentially compromises the efficacy of trade secrets as a means of IP protection throughout the Union.

⁹ Study on Trade Secrets and Parasitic Copying (Look-alikes) MARKT/2010/20/D

6 - MOVING FORWARD: RECOGNISING AND ENSURING THE EFFICACY OF TRADE SECRETS IN THE FRAGRANCE INDUSTRY

6.1 - Awareness and Vigilance

The loss of proprietary information in the fragrance industry is due, in part, to a lack of awareness of its value on the part of its owners. This is typically compounded by insufficient safeguarding of such information through contractual and other measures. Small or mid-size fragrance house are particularly vulnerable because often they cannot retain legal counsel to identify and monitor their intellectual property portfolios. On the other hand, SME's typically have closely knit personnel, often connected by familial bonds.

IFRA's engagement in this issue is also designed to raise awareness throughout the fragrance industry both of the economic importance of trade secrets and of effective means of safeguarding them. Widespread awareness on the importance of trade secrets and of managing this form of IP protection will be in the interests of all members of the fragrance industry. It is believed that this need is not unique to the fragrance industry or to its SMEs.

6.2 - Sanctions and Dissuasion

Security systems, workplace policies, contracts and similar private measures constitute only one dimension of effective trade secret protection. This must be complemented by unambiguous legislation that gives a clear definition of a trade secret and provides effective measures for protection and for sanctions and redress.

Without clear legislation and consistent trade secret protection across the Union, the fragrance industry and the value chain its supports will continue to be vulnerable to trade secret theft.

Exhibit 10 - IPRA France and Couleur d'Arômes

In 2012, two employees of IPRA France, a medium-sized fragrance and flavour house near Grasse transferred to another company, Couleur d'Arômes over 140 of IPRA's proprietary formulae as well as client lists.

IPRA discovered this misappropriation of trade secrets early and took legal action, claiming that it risked going out of business with the loss of over 100 jobs as price undercutting by Couleur d'Arômes, made possible by having access to IPRA's trade secrets, took effect.

IPRA's attorney has asked for €600,000 in damages and interest. However, on 13 June 2012, Grasse's criminal court dropped charges against the two IPRA ex-employees on grounds that their actions could not be considered as theft, because the allegedly stolen formulae remained at IPRA. This decision has been appealed by the public prosecutor.

Robust legislation on trade secret protection would provide legal recognition and protection for information that is of great value to the fragrance industry. It is our belief that the publicity associated with promoting, drafting, and enacting such legislation would also contribute to enhancing awareness of the need to protect trade secrets within the industry.

7 - IN CONCLUSION

“Without security man is neither able to develop his strengths nor to enjoy the fruits thereof.”

(Humboldt)

Global markets are very important to the fragrance industry, yet this industry remains deeply rooted in Europe.

The creation of appealing, original, and safe fragrances requires significant investment in both tangible and intangible assets. Misappropriation of the fruits of this investment undermines the incentive to innovate. It ultimately threatens this platform technology industry and the extensive value chain it supports, putting hundreds of thousands of European jobs and billions of Euros of GVA at risk. A vast range of products developed and manufactured by multinationals and SMEs will gradually lose brand equity without the innovation that the fragrance industry supports along its value chain.

Failure to be able to adequately protect IP using trade secrets as the tool will endanger future job and wealth creation in the EU industry sectors. MEP Edit Herczog warned of this danger: “The everything-for-free generation does not understand that the result of unprotected intellectual property today will be unemployment tomorrow.”¹⁰

For centuries, the creations of the European fragrance industry have added economic value to the products of a vast number of manufacturers, and enhanced the daily lives of billions of people globally. This legacy, now, more than ever, is at risk of misappropriation and must be protected in the interests of not only European industry, but also those of consumers throughout the world.

¹⁰ Statement during the Kangaroo’s working session of 01/02/2012 at the European Parliament





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