

Legal Protection of Perfumes: Tensions Between Intellectual Property Rights and Health Regulations

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Abstract:

Like other intellectual property rights that involve intellectual property rights, it must be legally protected through the enactment of numerous laws aimed at protecting the rights of producers and consumers. This includes intellectual property rights, such as patents to protect innovations in fragrance formulations and trademarks to protect names and logos. Natural ingredients are also protected through geographical indications that ensure the quality of products associated with specific regions, in addition to protecting endangered species. Safety and labeling laws ensure that perfumes are safe for consumers by examining chemical materials and disclosing ingredients. Consumer protection laws guard against fraud and price manipulation and regulate international trade for the import and export of perfumes while respecting intellectual property rights. Finally, there are environmental laws that contribute to reducing the impacts of the perfume industry on biodiversity and the environment in general.

Keywords: perfumes, fragrance formulations, patent.

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INTRODUCTION

Perfumes are one of the oldest and most refined industries that have been associated with humans for thousands of years, as the scent of perfume is a means of expressing personal taste and identity. Perfumes consist of a mixture of natural and synthetic materials that produce a distinctive scent, and the art of perfume formulation is considered one of the highest arts requiring creativity and precise techniques. Perfumes have always been part of multiple cultures, from the pharaohs in ancient Egypt to modern times, which have witnessed significant developments in the luxury perfume industry.

With the significant expansion of the perfume industry worldwide, another equally important aspect has emerged the legal side that governs this industry. Perfumes are not just a cosmetic product; they are subject to a number of laws and regulations aimed at protecting consumer health and ensuring product quality. This includes regulating the materials used in the formulation of perfumes, ensuring their safety, protecting related trademarks, as well as regulating advertising and transparency in marketing these products.

Thus, perfumes represent a blend of art, technology, and innovation, and their legal aspect reflects a commitment to protecting the rights of all stakeholders, from consumers to manufacturers. In this introduction, we will take look at the most important aspects of perfumes in terms of their nature and history, and then discuss the legal frameworks that govern this industry.

On the other hand, the perfume industry raises another issue related to intellectual property rights and trademark protection. In light of the prevalence of imitation and counterfeiting in the markets, how can we ensure the protection of innovative perfume trademarks and guarantee that the rights of creators are not manipulated or infringed upon?

Therefore, the issue of regulating the perfume industry in terms of the safety of the materials used in perfumes and protecting intellectual property rights remains one of the most significant legal challenges that require effective and balanced solutions.

Chapter I: Defining perfumes as a collection of aromatic compounds

Perfumes are one of the oldest and most important products created by humans. They are a chemical mixture composed of aromatic compounds extracted from plant, animal, or synthetic sources. Perfumes are primarily made up of concentrated essential oils, which are diluted with alcohol, along with the addition of fixatives to ensure the scent lasts longer. These various materials work in harmony to create distinctive fragrances that cater to different tastes and meet multiple needs.

Historically, perfumes have played a prominent role in human life since ancient times. In Egyptian civilization, essential oils were extracted from plants such as flowers, woods, and spices, and their use extended to religious rituals and bodily purification. They were also used for embalming the dead, based on the belief that they help preserve their bodies and sanctify them for the afterlife. In other civilizations, such as Greek and Roman, perfumes were considered a symbol of luxury and were used in both public and private celebrations. In Islamic civilization, the perfume industry witnessed significant advancement thanks to Muslim scholars like Ibn Sina, who developed the technique of distilling flowers and extracting essential oils, opening new horizons in this field.¹

In modern times, perfumes have become an integral part of daily human life. They are not only used to impart a pleasant scent but also serve as an expression of an individual's personality and taste. Perfumes are characterized by their ability to evoke emotions and memories, making them a powerful element in building individual identity and enhancing self-confidence.

In addition to personal use, perfumes play a significant role in the cosmetics and personal care industry. They are included in the production of soap, shampoo, deodorants, and air fresheners, making them an essential part of daily human routines.

With the advancement of technology, the perfume industry has become more sophisticated and complex. Today, entirely new scents can be created using synthetic ingredients that mimic nature, allowing for the innovation of

thousands of unique fragrances that meet the aspirations of diverse global markets.

The importance of perfumes is not limited to their aesthetic aspect; it also extends to therapeutic fields. "Aromatherapy" is known as a means to improve mental and physical health using essential oils extracted from plants. These treatments help alleviate stress, improve sleep quality, and enhance concentration.²

1.1 The history and stages of the art of perfumery

The perfume industry is considered one of the oldest and most prestigious industries in the world, with its roots in ancient civilizations where perfumes and essential oils were used for various purposes ranging from aesthetics to religious rituals. The origins of perfumery can be traced back to ancient Egypt, where the Egyptians discovered essential oils and used them in various fields, from medical treatments and scents used in religious celebrations to personal enjoyment. They also believed that perfumes held spiritual power capable of bringing humans closer to the gods, which explains their widespread use in their temples and tombs.

In the Middle Ages, the perfume industry witnessed a significant transformation, as it moved to the Middle East thanks to Arab scholars, who added innovative techniques for extracting essential oils. The most famous of these techniques was distillation, a process that had been developed by the Arabs, led by the scientist Ibn Sina, who used it to extract essential oils from plants and flowers. Through this advanced technique, the Arabs were able to extract oils with a high degree of purity, which greatly contributed to the development of the perfume industry. The Arabs also used perfumes in medicine and healing, as they were considered a means to improve mental and physical health.

Over time, these techniques spread to Europe during the Middle Ages, thanks to Arabic translations that reached European scholars, contributing to a revolution in the world of perfumes. During that period, the perfume industry began to transform into a commercial industry with a European character, as Italian cities like Florence and Venice developed centers for perfume production that were exported to other parts of the world.

In the nineteenth century, with the Industrial Revolution, European scientists began to develop modern techniques for creating perfumes using chemical compounds, leading to the birth of the modern perfume industry. This development allowed for the production of perfumes in larger quantities and a greater variety of scents, making them more available to the general public. At the same time, the perfume industry in France began to flourish significantly, with Paris becoming the main center for luxury perfume production, which added a new dimension to this industry in terms of quality and luxury.³

Today, the perfume industry is an essential part of the global economy, and the production of luxury perfumes is considered one of the most profitable industries in the world. France, in particular, is regarded as a leader in this field, housing the most famous luxury perfume brands that enjoy widespread popularity from all over the world. Perfumes have also become an integral part of the culture of many peoples, viewed not only as a cosmetic product but also as a symbol of luxury and elegance.

In addition, the perfume industry has witnessed significant development in recent years through the use of innovative technologies such as artificial intelligence and big data, which help companies create new fragrance compositions that align with the changing tastes of consumers.

1.2 Perfumes as a Global Industry

Perfumes are considered one of the main sectors in the global entertainment and beauty industry, representing an important part of different cultures and the foundations of luxury and opulence. The global perfume market is one of the vast and diverse markets, experiencing continuous growth and characterized by its ongoing evolution over the ages. This industry is not limited to being merely commercial; it is an artistic and scientific blend, requiring the ability to mix natural and synthetic materials in a way that creates an aesthetic and meaningful impact.

Scientific advancements in chemistry and technology are relied upon to improve perfume components and develop innovative formulations that align with the growing desires of consumers. Through modern techniques, perfumers can extract natural ingredients from flowers, fruits, spices, and

wood, and then blend them with synthetic compounds to create unique scents. Moreover, perfumes are not merely air fresheners; they have become part of individuals' personal identity, making them a tool for self-expression and social status.

In this context, France is at the forefront of countries that significantly contribute to the perfume industry, being the cradle of many of the world's most famous perfume brands such as "Chanel," "Dior," "Guerlain," and "Yves Saint Laurent." Paris is considered the global capital of perfumes, attracting the most renowned brands and perfume producers from around the world, making it a major hub in this field. The history of the French perfume industry dates back centuries, as the pharaohs and European monarchs used it for religious and aesthetic purposes, thereby enhancing France's status as a leading power in this domain.⁴

Over time, perfumes have evolved to include a variety of options that cater to different tastes. While luxurious perfumes that use rare and high-end ingredients dominate the high-end market, affordable perfumes have also emerged, providing diverse options for the broader public. This diversity reflects the significant expansion in the market, allowing consumers to choose a fragrance that fits their personality and budget.⁵

Recent studies indicate that the perfume industry represents a huge economic sector, estimated at billions of dollars annually, making it one of the key drivers of the global economy. This significant growth reflects the ongoing demand for fragrance products worldwide, whether in high-end markets or the mass market. The perfume sector is part of the global supply chain that includes agriculture, manufacturing, marketing, and distribution, enhancing job opportunities and increasing this sector's contribution to global economic growth.

Looking to the future, the perfume industry is expected to continue evolving with the growing awareness of sustainability and the shift towards using natural and environmentally friendly ingredients. These transformations may affect production and marketing patterns, opening new horizons for this sector, which still retains its appeal and importance on a global level.

1.3 Classification of perfumes by ingredients

Perfumes are primarily classified according to the aromatic components that make them up, as these components are fundamental in determining the scent and nature of the perfume. Perfumes are divided into several main categories, the most prominent of which are floral, woody, fruity, and spicy perfumes, in addition to oriental and modern aromatic perfumes that rely heavily on synthetic ingredients.

- a) **Floral perfumes:** are among the most famous and widely used types of perfumes in the world, due to their natural appeal and the comfort they provide to the user. Floral perfumes include ingredients such as rose and jasmine, which are considered some of the most famous flowers used in the production of luxury perfumes. These perfumes are characterized by their softness and delicacy, making them suitable for formal occasions and everyday situations. Floral perfumes give a sense of femininity and freshness, which is why they are widely used in women's fragrances, but there are also floral perfumes used in men's fragrances.⁶
- b) **Woody perfumes :** stand out significantly for their warm and complex scent, using ingredients such as sandalwood and cedarwood to create these luxurious aromas. Woody perfumes are distinguished by their ability to add a touch of luxury and elegance, and they are used in fragrances targeting an audience seeking alluring and mysterious appeal. These perfumes are often considered stronger and more lasting, preferred for evening occasions or cold atmospheres. Woody perfumes are also among the types that may suit both men and women, especially those who prefer unconventional scents.⁷
- c) **Fruity perfumes:** are characterized by the use of ingredients extracted from fruits such as orange, apple, and berry, giving them a refreshing and vibrant character. These perfumes are often lighter and less dense, making them ideal for summer or hot days. Fruity perfumes are considered a popular choice among young people who tend to prefer fresh and lively scents.
- d) **Spicy perfumes:** include ingredients such as cinnamon, pepper, and cloves, characterized by a warm and strong scent. These perfumes are

used to add depth and special spices to the fragrance, making them a distinctive choice for cold atmospheres and evening times. These perfumes reflect a spirit of adventure and uniqueness, and are commonly used in men's fragrances, but they can also be part of luxurious women's perfume compositions.

- e) **Eastern perfumes:** include warm and complex ingredients such as amber, musk, and vanilla, giving them a rich and luxurious scent. These perfumes are known for their ability to create an atmosphere of magic and mystery, and are particularly common in Arabic fragrances. Eastern perfumes often feature high longevity, making them last for long periods and leave a strong impression.

With scientific advancement, synthetic perfumes have become an integral part of the modern perfume industry. Chemical and aromatic compounds, such as esters and synthetic flavoring compounds, are used to create new scents that may be difficult to obtain from natural ingredients. These perfumes reflect technological advancement in the perfume industry, enabling companies to innovate unique and sometimes unconventional fragrances, allowing consumers to choose from a wide range of unique perfumes that do not solely rely on natural ingredients. Sometimes, natural ingredients are combined with synthetic ones to enhance effectiveness or to develop an entirely new scent.⁸

1.4 Techniques for manufacturing perfumes and stages of production:

The process of making perfumes begins with the extraction of aromatic materials, which are the compound that give the perfume its distinctive scent. These materials are usually extracted from plants, flowers, fruits, bark, and roots, in addition to some animal or synthetic materials. Steam distillation and cold pressing techniques are among the most common methods for extracting essential oils, which are considered the main component of perfumes. Other methods, such as solvent extraction or juicing for plant materials, can also be used to accurately separate the aromatic oils.

After extracting the aromatic oils, the blending and formulation stage

follows, where the perfumer, known as "the nose," combines these materials in specific proportions to achieve the perfect balance of scents. This stage requires exceptional skill and precision, as the perfumer must carefully select the different ingredients and ensure that the scents harmonize and complement each other seamlessly. The blending process includes mixing a range of base ingredients, known as the "base" (such as sandalwood or musk), the "heart" (distinctive scents like rose or jasmine), and the "top note" (light scents such as citrus or herbs).

Alcohol is added to the aromatic mixture to serve as a medium that helps stabilize the scents and increases their longevity. After this stage, the perfumes are packaged in bottles, which come in various shapes and sizes. In some cases, natural or synthetic fixatives are added to enhance the scent's longevity on the skin.

Through all of this, and with the advancement of technology, the perfume industry has begun to witness a shift towards the use of more sustainable techniques. One of the most prominent of these techniques is the biological extraction of aromatic materials using the microbiome, which allows for the extraction of essential oils with less impact on the environment. In addition, new methods are being researched to help reduce the consumption of natural resources, such as using biodegradable solvents or sustainable cultivation of plant sources. These innovations contribute to making the perfume industry more environmentally friendly and reduce the environmental impact resulting from the extraction of aromatic materials.⁹

Chapter II: Legal Protection for Aromatic Products

The perfume industry has greatly benefited from intellectual property protection, which ensures its uniqueness and innovation. Intellectual property rights encompass many dimensions that provide comprehensive protection in this field. Trademarks, for example, are considered a fundamental tool to ensure that the brand name associated with a particular fragrance is not manipulated, thereby enhancing consumer confidence in the quality of the product.

As for patents, they provide protection for innovative chemical compositions and unique methods in perfume manufacturing, allowing

companies to maintain the uniqueness of their fragrances for a specified period. Copyrights are also an effective tool for protecting innovative designs of bottles or packaging used by brands, which enhances product identity and distinguishes it from others. Overall, these legal rights provide a suitable environment for the perfume industry to maintain and protect innovation, benefiting both companies and consumers alike.

In general, these legal rights provide a suitable environment for the perfume industry to maintain and protect innovation from imitation, benefiting both companies and consumers alike.¹⁰

1.1 Trademarks :

Trademarks are one of the most important means of protection in the perfume industry. A trademark is used to identify a specific name or logo that reflects the identity of the perfume or the company producing it. By registering the trademark, the rights holder is granted exclusive rights to use this trademark in the market, preventing others from imitating the name, logo, or any part of the visual identity of the trademark.

- The protection of trademarks in the perfume industry includes:

- The trade name: such as "Chanel" or "Dior," which is closely associated with a specific perfume.
- Logos and symbols: artistically designed logos like those of "Tom Ford" or "Gucci."
- Packaging: uniquely designed packages or bottles can be protected as a trademark if they have distinctive commercial value.

The benefit of protecting perfumes under trademarks ensures that companies maintain their position in the market and contributes to building a long-term trust relationship with consumers. It also provides legal protection against unfair competition or imitation that may harm the reputation of the trademark.

1.2 Patents:

Patents are considered tools for protecting technological innovations in the perfume industry, especially concerning new chemical formulations or innovative methods for manufacturing perfumes. A patent is a certificate granted by the relevant authorities, acknowledging the inventor's rights to

the invention, and it has various forms.

- Protecting patents in the perfume industry includes:

- New perfume formulations: Some companies strive to discover new components or formulations that give the perfume a distinctive and unique scent, enhancing the product's appeal in the market.
- Advanced manufacturing methods: Such as production techniques that may affect the longevity of the scent or improve the interaction between natural and synthetic components.

The benefit of patents: A patent is granted for a period, usually up to 20 years, during which the inventor has the exclusive right to use this idea or method. This provides companies with the opportunity to profit from their innovations without the risk of imitation by competitors. After the protection period ends, anyone can freely use these techniques.

1.3 Copyright:

Copyright plays an important role in protecting creative forms represented in the artistic designs of perfumes, such as the design of bottles or luxurious packaging. If the bottle design is distinctive or carries an artistic character that reflects the brand's identity, the company can register it under copyright.

- Copyright protection includes:

- Packaging and bottle designs: The unique shape of the bottle is considered a work of art that may be subject to unauthorized copying.
- Promotional designs: This can also include advertisements or promotional materials that are characterized by artistic beauty and are part of the brand's visual identity.

The benefit of copyright: Protecting design rights prevents competing companies from imitating or copying the unique designs that make the fragrance stand out in the market. This type of protection also enhances companies' ability to differentiate their products in a highly competitive environment.

1.4 Trade Secrets:

In addition to official intellectual property rights, trade secrets are an essential part of the perfume industry. Major companies protect the

ingredients and formulations of perfumes that are considered trade secrets by not disclosing them publicly. The secret of the unique formulation of a fragrance serves as a fundamental pillar for innovation in this sector. ¹¹

- Protecting trade secrets includes:

- Ingredients: Some secret ingredients in the fragrance may be part of its unique identity that must be protected from leakage.
- Internal processes: Such as production methods or special ingredients that are not disclosed.

The benefit of trade secrets: They help maintain the competitive edge of perfume companies. As long as information related to formulations or production methods is not known to the public or competitors, the company remains in a leading position in the market.

1.5 Protection of Industrial Designs

In some cases, the industrial design of perfume products, such as packaging and bottles, is protected separately from copyright. Although the design of the packaging can be protected by copyright, registering industrial designs provides additional protection related to the unique designs that the packaging or bottle may possess.

The benefit of protecting industrial designs: Protection of industrial design grants companies legal rights against imitation or unlawful use of luxurious or distinctive packaging designs used with perfumes. ¹²

1.6 Regulations and International Agreements

The perfume industry also benefits from a range of international agreements that ensure the protection of intellectual property rights across borders, such as the Paris Convention for the Protection of Industrial Property, or the Berne Convention for the Protection of Copyright.

- The benefit of international agreements: These agreements provide a unified legal framework for protecting intellectual property rights, allowing companies to safely expand their operations in multiple international markets.

Chapter III: Legal Protection for Aromatic Products

Laws intersect in influencing the perfume industry at various levels.

1.1 Public Health and Consumer Protection

Consumer safety is one of the top priorities in the perfume industry, as perfumes may contain ingredients that can cause skin irritation or allergies in some individuals. To achieve this, strict laws are enforced globally to regulate the materials used in perfume production.

Since European regulations are the strictest in this field, they rely on the guidelines of the International Fragrance Association (IFRA). For example, the maximum limit for the use of ingredients such as coumarin, a substance that may cause allergies in some individuals, is specified. Additionally, the European REACH legislation requires companies to provide detailed reports on the chemicals used to ensure their safe use.

On the other hand, although the Food and Drug Administration (FDA) does not require prior approval for fragrance formulations, it mandates that companies use "safe" materials. Furthermore, California's Proposition 65 requires companies to provide warnings if a product contains substances that may cause cancer or reproductive harm.

1.2 Environmental Sustainability and Planet Protection

With the increasing awareness of the impact of industrial activity on the environment, environmental laws have become an integral part of the fragrance industry. The raw materials used in the production of perfumes, such as oud wood and amber, often come from natural sources, making this industry susceptible to environmental impacts and international regulations.¹³

- a) International Agreements:** The Convention on International Trade in Endangered Species (CITES) prohibits the over-exploitation of natural resources used in the fragrance industry. For example, the trade in sandalwood and oud wood is regulated to ensure that ecological balance is not harmed.
- b) Regulations on Volatile Organic Compound Emissions:** The chemical components used in fragrances can lead to air pollution. For this reason, many countries require companies to reduce emissions of these compounds.

Additionally, many fragrance manufacturers have begun to shift towards sustainable sources and synthetic alternatives as part of their efforts

to comply with environmental standards.

1.3 Future Challenges and New Developments

With scientific advancements and increased awareness of environmental and health issues, international laws continue to evolve. The current focus includes:

- a) **Allergenic Substances:** Ongoing research is being conducted on the effects of certain ingredients on individuals with sensitive skin, prompting regulatory bodies to continually amend laws.¹⁴
- b) **Sustainability:** There is a global trend towards using sustainable ingredients and reducing the carbon footprint of the perfume industry.
- c) **Transparency :** Consumers today are demanding greater transparency regarding perfume ingredients, driving companies to provide clear and simplified ingredient lists.

Protecting natural ingredients in the perfume industry is a fundamental step in preserving the heritage of this industry and ensuring its sustainability. By using mechanisms such as geographical indications, patents, and original labels, countries can protect the unique perfume ingredients that represent a part of their culture and history. At the same time, this protection contributes to enhancing the commercial reputation of local products and providing economic support to producing regions.

Chapter IV: Protecting Natural Components in Perfumes

Protecting natural ingredients in the perfume industry is a fundamental step in preserving the heritage of this industry and ensuring its sustainability. By using mechanisms such as geographical indications, patents, and original labels, countries can protect the unique perfume ingredients that represent a part of their culture and history. At the same time, this protection contributes to enhancing the commercial reputation of local products and providing economic support to producing regions.

1.1 Protecting Raw Materials

The perfume industry often requires the use of natural ingredients such as flowers, herbs, and fruits. Although synthetic perfumes have gained significant popularity, many companies still rely on natural ingredients that are an integral part of the aromatic tradition, such as rose, jasmine, and lavender.

Legally, natural raw materials can be protected through intellectual property rights such as patents or geographical indications. In this context, international law recognizes the right to protect geographical indications,

which ensure that aromatic materials derived from specific regions can be protected under intellectual property rights. For example, a geographical indication like "Taif Rose Perfume" may be protected due to the use of specific components extracted from Taif roses in Taif, Saudi Arabia. These geographical indications work to protect the quality of products associated with a specific geographical location, preserving the commercial reputation of this product and enhancing its value in the market.

1.2 The Convention on Biological Diversity

Biodiversity is one of the vital issues affecting the perfume industry. Many perfumes contain plant and animal ingredients extracted from threatened environmental resources. The Convention on Biological Diversity was concluded in 1992 with the aim of protecting the environment and conserving environmental resources. This convention contributes to defining the rights of countries to use environmental resources associated with perfumes. It encourages the sustainable use of these resources, which requires companies to obtain legal permission to extract natural ingredients, such as essential oils. Through this convention, it is ensured that the natural ingredients used in the perfume industry are not exploited illegally or lead to the destruction of environments.¹⁵

CONCLUSION

In conclusion, it is clear that the perfume industry represents a blend of art and creativity that is closely linked to human culture and social development. Despite the significant advancements in this industry and the emergence of new innovations in fragrance formulations, the legal aspect of this industry remains of utmost importance to ensure consumer safety and protect the rights of creators. Existing legislation imposes the necessity of monitoring fragrance ingredients, in addition to protecting trademarks, which helps reduce health risks and protect intellectual property rights. However, there are still significant challenges in effectively enforcing these laws, especially in light of the rapid development and counterfeiting that the market suffers from. Hence, the need arises for the development of more flexible and effective legal frameworks to ensure the preservation of the quality and safety of fragrance products and protect them from counterfeiting.

Results :

1. Safety of fragrance ingredients: It has been confirmed that strict control over the chemical and organic ingredients used in the perfume industry is essential to ensure they do not negatively affect consumer health.

2. Protection of intellectual property rights: Laws related to trademarks and copyright contribute to reducing the phenomenon of imitation, thus preserving the rights of creators and manufacturing companies.

3. Legal challenges: Despite the existence of protective legislation, its application in some countries may face difficulties due to the variety of ingredients and the presence of prohibited or unreliable substances.

Recommendations :

1. Strengthening control over fragrance ingredients: Regulatory bodies should enforce stricter oversight on the ingredients used in the perfume industry to ensure their safety, and increase international cooperation to combat harmful substances.

2. Developing legal legislation: It is recommended to develop and update legislation related to intellectual property protection, enabling companies and brands to safeguard their innovations while addressing imitation challenges in the markets.

3. Enhancing transparency in marketing: Companies should disclose more about the ingredients in their products, especially substances that may cause allergic reactions or health problems, to provide greater protection for consumers.

4. Raising awareness about safety and quality: It is essential to increase consumer awareness about the risks of certain harmful fragrance materials and promote a culture of purchasing products from reliable sources to ensure quality and safety.

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