THE USV ANNALS
OF ECONOMICS AND
PUBLIC ADMINISTRATION

VOLUME 12,
ISSUE 2(16),
2012

THE NON-QUALITY OF COUNTERFEIT PRODUCTS AND THEIR EFFECT ON CONSUMERS AND THE INTELLECTUAL PROPERTY RIGHT

Lecturer PhD. Emilia PASCU Lecturer PhD. Petronela-Sonia NEDEA Lecturer PhD. Oana-Maria MILEA

Faculty of Touristic and Commercial Management
"Dimitrie Cantemir" Christian University, Bucharest, Romania
pascu.emilia@ucdc.ro, petronela844@mail.com, o rez@yahoo.com

Abstract:

Breaking the intellectual property rights (IPR) has huge effects on the free movement of merchandise and of the occupying degree of work places, affecting both economic development and consumers' health, and the rightful trademark owners and the companies which legally exploit them are the main "actors" to undertake the effects of this phenomenon which, in the last few years, has grown with more than 1000% according to data published by the World Trade Organization.

In the last 20 years, the growth of cases of breaking the intellectual property rights has led to the development of various agreements at a global scale.

The TRIPS agreement was created by World Intellectual Property Organization and World Trade Organization and it represents the main element of fighting against counterfeiting and piracy in all member states.

Key words: innovation, certifies and guarantees, counterfeit products, intellectual property rights

JEL classification: D1, D2, O3

1. INTRODUCTION

Breaking the IPR equally refers to the following two phenomena: counterfeiting and piracy. *Counterfeiting* refers to breaking trademark rights in the case of products and services (trademarks) and the term *piracy* is usually used in relation to breaking the author's right or to copying the patterns and registered designs without the rightful owner's consent. As a generic term for all types of breaking the rights, the term "counterfeiting" is sometimes used in a wrong manner, even by experts.

Due to the important amount of money obtained, the counterfeiting industry represents an important source of tax evasion, but at the same time it can be perceived as a significant danger for producers, distributers, consumers and the state.

We can talk about a "globalization" of counterfeiting because all cities in the world deposit counterfeit products, their producers taking advantage of the fact that borders are now free and open and they also use high technology for producing such items. Words are not enough when it comes to fighting against counterfeiting; actual measures are needed in order to discover what lies under the tip of the iceberg.

2. THE INTELLECTUAL PROPERTY RIGHTS THROUGH THE LENSES OF COUNTERFEITING

The agreement which funded the World Intellectual Property Organization, signed in Stockholm, July 14th, gave a huge official importance to the intellectual property right and it includes four major domains (figure 1.1).

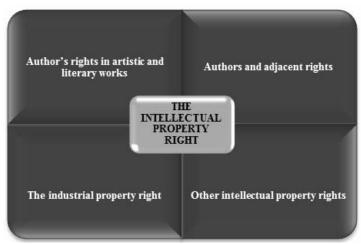


Figure 1.1. IPR components

Source: Pascu, 2011

World Trade Organization defines, in art. 51 of TRIPS Agreement, the counterfeiting of trading merchandise as being: "any type of merchandise, including wrappers which wear, without having authorization, a trademark identical to the legally registered trademark for such products or which cannot be differentiated in what regards its essential features from such a trademark and which consequently breaks the rightful trademark owner's rights, placed under the laws of the country which imports it". In this sense, WTO equals the terms of crime and counterfeiting, suggesting all member states to develop penalties similar to those for drug trafficking operations.

There are a lot of methods that can be used in order to counterfeit various products because these producers' imagination is beyond any limits (figure 1.2) (Răducanu, 2002).

COUNTERFEITING METHODS							
DENATURING	SUBSTITUTION	IMITATION	DISTORTION	RECONDITIONIN	RESTORATION	PIRACY	OTHER METHODS

Figure 1.2. Counterfeiting methods

Source: Pascu, 2011

3. THE DEVELOPMENT OF COUNTERFEIT PRODUCTS' MARKET AND THEIR IMPACT

Starting with the 2000s, especially after 2002, the value of counterfeit merchandise has registered the most significant growth (14 times), in 2011 reaching the total of an annual 400-500 billions, approximately 350 billion Euros. The underground economy which is the result of the trade in such products annually occupies approximately 25% of the world trade volume, according to international studies. We talk about huge profits which are excluded from the normal circle of economy, and there are times when legal authorities are helpless in dealing with this phenomenon.

In 1999, a number of 25.285.838 items were seized at EU's borderlines because they were considered to prejudice an intellectual property rights (IPR), representing 4.694 cases. In 2009 (according to World Customs Organization) there were noticed 43.672 cases of breaking IPR, consisting of 117.959.298 items.

There are fears that such activities of breaking the IPR through counterfeiting and piracy are used by the Mafia in order to finance their actions; in this context, FBI defines counterfeiting as the "21th century's criminality" (Viefhues, Linklaters, Oppenhoff and Rädler, 2004).

An indirect effect of this phenomenon is the economical decrease of developing countries because of the lack of investors on markets full of counterfeited products. The lack of a solid legislation able to discourage the trade in counterfeited products is the first signal for investors who are threatened by such products. A direct consequence of this type of trade is the decrease in the money given for innovations, because of the low level of living and the low purchasing power of the consumer

Innovation is one of the key instruments in developing successful businesses which could impose advantages on the market. Therefore, companies will have to constantly improve their products, as well as the technical solutions for obtaining them. The main disadvantages for rightful company owners appear when counterfeiting leads to obtaining benefits from the sums used by the rightful owners – a situation known as *free-rider* (1).

Another effect (on the consumers) of trading counterfeited products is represented by a decrease of original products sales when the product does not fit the quality standards of the original product because of the low quality of the counterfeited item. Moreover, if the rightful owner is responsible for the authentic product, he can continue to be blamed by consumers for the damage produced by falsified items (2). Such problems are due to the fact that counterfeit products are being made under the quality standards of the real products, leading to a negative effect of trade in such products by diminishing consumers' protection. There are behaviors which still determine the purchase of falsified products because these items are cheaper than the original ones and similar to them. However, consumers must understand that counterfeited products don't have the same quality as the original ones, although there are cases in which they look similar to the real goods thanks to the latest technology used in producing them. Moreover, security and guarantee services aren't available for counterfeit products. The purchase of such products, without knowing that they are false, leads to another problem. The consumer acknowledges the product's low quality and he loses interest in that precise trademark. This happens not only in developed countries, but also in developing ones.

From a social point of view, counterfeit products affect the good functioning of society, but there are also cases in which the consumers' health and security are put in danger. We should remember that counterfeited medicines represent up to 10% of the world pharmaceutical industry's business number (World Health Organization, 2010).

The economic impact of products' counterfeiting has serious consequences for IPR rightful owners, as well for the global economy, taking into account the financial loss. In this case, counterfeiting is connected to cross-border criminality. This is the reason why trading counterfeited goods (or any other products which break the IPR) leads to serious damage to producers, traders and rightful owners who respect the law and it also puts in danger the consumers' health and security (CE, 2003).

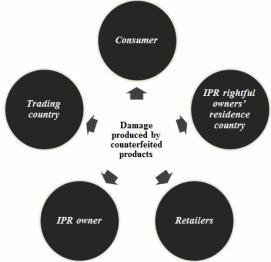


Figure 1.3. Damage produced by counterfeited products

Source: Pascu, 2011

4. QUANTIFYING THE REQUEST FOR COUNTERFEITED PRODUCTS

Taking into account that the main counterfeiting determinant is the request for such products, according to the Organization for Economic Co-Operation and Development the following reasoning could be applied in order to notice the extent to which the request for counterfeited products influences the offer of such goods (Pascu, 2011).

Supposing that i is a client who is satisfied regarding his experience with a k good, the satisfaction level achieved by agent i is directly proportional to the consumed product's quality level (a higher quality determines a higher satisfaction degree as a result of consuming the product). In this sense, we could say that the value of the client's satisfaction is $v_i(k)$ (OECD, 2008).

The traded goods differ according to the easiness that their quality is being acknowledged by consumers. This acknowledgment equals the consumer's estimation of a product's performances in domains in which he is particularly interested. The estimation must be prior to the purchase and the easiness of this process determines the extent to which the needs of a certain consumer have been satisfied after consuming that good.

The quality of certain types of products cannot be estimated at the moment of their purchase. The effect of consuming products such as those from the pharmaceutical, food, beauty industries are to be seen after their consumption. Moreover, the purchase of a specific product could be influenced not only by the consumer's personal experience, but also by features such as the notoriety of the trademark, certain recommendations (flyers, prospects etc.). It must also be taken into account the fact that we cannot establish if we can achieve the anticipated effects of that product before its consumption. As compared to pharmaceutics or cosmetics, the quality of other product types (such as those belonging to music or clothing industry) can be easily tested. Still, we cannot talk about cases in which the consumer is able to exactly establish by himself the quality of the good. In turn, clients can have different expectations regarding the quality, and this expectancy level is determined by:

(1.1. $E[v_i(k)]$ where: E represents the function of the product's real quality.

This function reflects that a consumer acknowledges the possible performances of the given product.

In order to optimize a good k, the client must make a minimum of effort before purchasing the product and this effort would be translated by searching and locating the product. This nonmonetary cost would be known as $c_i(k)$. Therefore, if the price of product k is given by p(k), the utility of using a good k predicted by an agent i is given by the equation:

(1.2.)
$$u_i(k) = E([v_i(k)]) - c_i(k) - p(k)$$

The client will buy the good k only under the conditions of a higher utility than the predicted one, regardless any other alternative, including that of not purchasing the good k, referred to as $A_i(k)$ (3).

Clients differ according to their expectances of consuming a good k, the alternatives assessment or the assessment of not purchasing it, as well as according to the efforts that they are willing to sustain in order to obtain the good. These differentiations are realized from the point of view of every agent's particular features (taste, preferences, income (4), assessments and the interest in health and security etc.). Placing the agents in a hierarchy according to the estimated satisfaction degree minus nonmonetary costs, taking into account the condition that to a hierarchical inferior it corresponds a higher satisfaction level, it permits determining an expression for the request of a good k.

Therefore, the request is determined by the number of clients for which the estimated satisfaction, minus nonmonetary costs of the purchase, being higher than the economic value of the non-purchasing.

(1.3.)
$$D(p(k)) = \sum (E[v_i(k)] - c_i(k) - A_i(k) - p(k))d_i$$

5. ANTI-COUNTERFEITING MEASURES

It is said that any trademark is a product, but not any product is a trademark. A trademark is much more than a simple product.

In fact, a trademark can be perceived as a complex symbol. The trademark represents the immaterial sum of all those features which constitute a product: name, package, price, history, reputation, promoting methods. A trademark also contains the customers' opinions related to their experience with the product or related to previous market experiences. Therefore, the process of maintaining the quality is essentially based on keeping these intrinsic features of the product. In this direction, the fight against counterfeiting becomes an issue of global importance as counterfeiting has developed both at a national and international scale.

There are some products which bring high profits from sales and there are others that – thanks to the so called reverse engineering. That means that the counterfeiter acknowledges the functioning principles of the original product by analyzing its internal structure and way of functioning. Then, the products would be produced at a large scale and traded by breaking the regulations (Blakeney, 2006). The prices are similar to those of the original products, therefore the consumers are misled and determined to buy an "original".

The best tool in stopping this phenomenon is a good cooperation between the IPR rightful owners and the national control authorities. Moreover, by means of harmonizing the national legislations in the field of intellectual property, the EU's member states can obtain a homogenous system in their fight which has grown even more difficult because of the differences between the legislations in this field.

There is a technical solution for fighting against forgery and for protecting trademarks already on the market, consumers, trademark users, authentic products and services, or for respecting the regulations regarding the protection of producers and consumers, for applying the CE's rules in Romania. It is a secured marker and its highly qualitative design is verified and registered in *Hologram Image Register* – London (*Counterfeiting Intelligence Bureau*) at *Hologram Manufacturers Association* (5).

The hologram *certifies and guarantees* the original product or service and it is verified by the control organisms for assessing its authenticity and responds to any claim of the consumer by means of verifying both the product and the juridical entity which produced or imported the product.

The material of which the hologram consists is a mix of aluminum and polyester, having dimensional stability and exceptional mechanical resistance to the majority of the usual solvents. When one tries to unstuck it (by means of vacuum deposition metal layer) one gets a controlled breach which leads to an easily detectable irreversible destroy.

Holograms can be applied to products, wrappers, documents, electronic equipment labels, clothing, alcohol, software, CDs, watches, sportswear, medicine, notarial documents, various documents which need to be certified etc., the legal organisms being able to detect the counterfeit product.

From 2005, another method of fighting against counterfeiting is represented by applying the correspondent labels depending on the specific categories and having the possibility of controlling them. The label mentions the number of milliliters, the alcohol concentration (dal) and their customization according to each marking owner. Moreover, the fiscal repositories have been introduced, in the sense that all the transports of products which can be excised come with administrative documents of the merchandise (DAI) which are printed at the National Printing

Office. It has been introduced mark encoding in order for each mark could be identified in an individual manner by particularizing each label. Therefore, date and time of delivery as well as emission features become easily accessible; it annuls any type of fraud even when the labels disappear in order to be used at another time.

Despite these facts, counterfeiters prefer alcoholic beverages due to their known trademarks which can generate high gains by avoiding excises and taxes. The most frequent method of alcohol counterfeiting is by refilling the original bottles with inferior substitutes and also creating mixed beverages, which contain both qualitatively inferior and superior alcohol in order to mask the distinctive taste of the alcoholic base.

A report published by Food&Drink Europa states the fact that Moscow annually loses over 1 billion dollars because of counterfeited products.

Taking into account that taxes are the main component of the selling price (they can reach even 80% as in the case of alcoholic beverages), cigarettes are very interesting for counterfeiters (6), the most common way of breaking the intellectual property rights in this domain being the abusive use of a trademark (design counterfeiting is rare) (Treasury, 2006).

In order to diminish this phenomenon in Romania (given its dimensions, we cannot hope that it would stop, at least not immediately or totally) we could consider the following possible anti-counterfeiting measures:

- ✓ creating a secure climate regarding anti-counterfeiting in the trade circuit.
- ✓ managing the conflicts regarding the anti-counterfeiting process between various economic agents.
- ✓ developing some legislative projects regarding the optimization of commercial relations and the consequences of such relationships, allowing trading companies to focus more on those available resources which are going to be used in order to protect the consumer and to develop original products and services that would correspond to legal regulations which set the frame for quality standards (that should be respected) and the consumers' requests.
 - ✓ developing partnerships with the authorities, public institutions and representative organisms of civil society;
 - creating a partnership between investors, producers, consumers and authorities in an anticounterfeiting campaign by means of creating a solid economic climate which would also be open to investments.
 - ✓ collaborating with international networks of fighting against counterfeiting; signaling counterfeiting cases by means of information, data images regarding traded counterfeited products, as well as the companies which sell them. They should be periodically mentioned in the consumers' benefit in order to prevent such situations and to discourage the purchase of such goods.
 - ✓ the periodical signaling of those cases in which counterfeited products are detected: localization, market segments, interest in buyers and the elaboration of a risk analysis regarding the forgery of a trademark on the Romanian market, ended up with creating a file for each counterfeited trademark:
 - ✓ aligning to the EU's legislation is the most important measure which needs to be taken in order to fight this expanding phenomenon.

6. CONCLUSIONS

An important contribution to fighting against counterfeiting is the development of a set of regulations, in the sense that the country of provenience of a certain product should be mentioned (especially when it comes to third party member states of the EU), allowing the growth of transparency regarding the origin of various products such as clothing, which are often counterfeited.

All these can help to diminish the phenomenon which is currently affecting all international markets and which cannot be fought. The care must be oriented towards the consumer's protection, not only towards protecting IPR.

The fight against counterfeiting can be efficiently made even by educating the consumer, the best example being that of Germany, where there are shops which comparatively present both the original product and the counterfeited one, coming from the import. They present identification features and prove their low quality, the comparative resistance of each product and they also explain from an economical point of view the benefits of purchasing the original (keeping the work places, guarantee certificates, product's life, economic growth). This way they try to diminish the requests of counterfeited products.

NOTES

- (1). For example, the economists are talking about the "free-rider" problem, when certain people obtain benefits from the expenses or investment of somebody else
- (2). In the mobile phones industry, for example, a producer has registered image damage and sales decrease after a phone recharger exploded while it was in use. The analysis proved that it was counterfeited.
- (3). In most of the cases, this has value zero; in other cases, for example, when k is a remedy for a incurable disease, the value of not purchasing it might tend towards $-\infty$, $E([v_i(0)]) = -\infty$.
- (4). It reflects the budget constraint of an agent i
- (5). International Holograms Manufacturers Association is a nonprofit organization that represents and promotes the worldwide interests of producers of holograms. Founded in 1993, the association currently has 90 members worldwide and offices in Europe and America.
- (6). From the point of view of counterfeited cigarettes' provenience, The European Organization for Trade and Development suggests than over 50% of the total production of counterfeited cigarettes come from China, where there are estimated over 100 billion counterfeited cigarettes annually, also taking into account its own trade.

REFERENCES

- 1. Chaudhry P., Zimmerman A. S. (2009), The Economics of Counterfeit Trade, *Springer Publishing*,
- 2. HM Treasury, (2006) New Responses to New Challenges: Reinforcing the Tackling Tobacco Smuggling Strategy, www.hm-treasury.gov.uk
- 3. Pascu E. (2011) Harmonizing the Romanian and the European Union's legislative frames regarding the fight against counterfeiting in relation to consumer's protection, Bucharest: *the Universitary Publishing House*
- 4. Răducanu, I (2002) Falsifying Industrial Merchandise, ASE Publishing House, Bucharest, cited by Părăian R. and Pascu E. (2011) in Merchandise Expertise, Bucharest: Prouniversitaria Publishing House
- 5. Viefhues, M., Linklaters Oppenhoff & Rädler (2004), Counterfeiting and Organized Crime, Special Report of Counterfeiting, *International Trademark Association*
- 6. *** Council Regulations (CE) no. 1383/2003-12-03 regarding customs control actions pointed against products which are suspected to interfere with the intellectual property rights and the measures that need to be taken against all counterfeited merchandise
- 7. *** OECD (2008), The Economic Impact of Counterfeiting and Piracy, *OECD Publishing*,
- 8. *** Global Status Report on Health (2010) World Health Organization, http://www.who.int/whosis/whostat/EN WHS10 Full.pdf