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The impact of lifestyle regulation on intellectual property: packaging-related requirements and other IP-restrictive measures

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Introduction

The purpose of this chapter is to shed some light on the emerging, yet largely unexplored, intersection between lifestyle regulation and intellectual property (IP) law. It first discusses the impact of a growing number of regulatory measures aimed at reducing the consumption of products that are harmful to people, such as tobacco, alcohol and HFSS foods, on IP regimes. Such measures generally affect product presentation, limit advertising, product availability and manufacturing and may also include fiscal measures. Their adoption is triggered by a set of international regulatory instruments, namely the legally binding WHO Framework Convention on Tobacco Control (FCTC),[1] as well as certain soft-law instruments such as the WHO Strategies on Alcohol and Diets, the 2011 United Nations Political Declaration on NCDs and the WHO Global Action Plan for the Prevention and Control of NCDs 2013–2020.[2]

For our purposes, these measures can be grouped into four categories: (i) measures related to the presentation of products (for example, packaging-related requirements and display bans on cigarettes and other products); (ii) measures related to advertising (for example, advertising prohibitions or restrictions, or bans on aggressive marketing

[1] WHO Framework Convention on Tobacco Control, opened for signature 16 June 2003, 2302 UNTS 166 (entered into force 27 February 2005) ('WHO FCTC').

[2] See WHO Global Strategy to Reduce the Harmful Use of Alcohol (2010), WHA63.13; WHO Global Strategy on Diet, Physical Activity and Health (2004), WHA57.17; *Political Declaration of the High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases*, GA Res. 2, UN GAOR, 66th sess., 3rd plen. mtg, UN Doc A/Res/66/2 (2012); WHO Global Action Plan for the Prevention and Control of NCDs, Resolution WHA66.10 endorsed by the 66th WHO World Health Assembly.

strategies, especially those targeting minors); (iii) measures restricting availability of products (for example, sales restrictions to and by minors, and bans of vending machines dispensing alcohol, cigarettes or HFSS products); and (iv) measures related to the manufacturing of the products (for example, bans on the use of certain ingredients including trans-fats in foodstuffs, and bans on the use of additives in tobacco such as flavouring or colouring agents).

The purpose of these measures is to reduce the consumption of products considered harmful and thus protect consumers' health. Yet these measures also have the effect of reducing the ability of tobacco, alcohol and food manufacturers to produce, present, advertise and market their products as they wish, and to make them appealing to consumers. More importantly, as will be highlighted in the first part of this chapter, all these measures impair the ability of manufacturers to fully exploit their IP assets, whether they are (a) registered or unregistered trademarks affixed on products and packaging; (b) copyrighted works displayed on products or packaging; (c) distinctive trade dress and get-up for products; (d) registered or unregistered designs incorporated in products or packaging; or (e) patented inventions related to ingredients and constituents or related to packaging. The second part of the chapter will look at whether the inability of tobacco, alcohol and food manufacturers to fully use their IP assets due to the introduction of regulatory measures intended to curb consumption of their products may encroach upon the exclusive rights offered by IP laws.

Finally, the last part of the chapter will discuss whether and to what extent IP laws, and in particular patent procedures (in or outside Europe), may be amended with a view to incentivizing companies to produce and market healthier products in the field of foodstuffs and beverages.

Regulatory measures affecting IP in the fields of tobacco, alcohol and foodstuffs

Regulatory measures often have a negative impact on business and trade, as they make it more expensive and cumbersome for companies to produce and market their products. This is particularly true of industries that have, traditionally (and rather heavily), been regulated, such as tobacco, alcohol and food. Recently, both within and outside Europe there has been an increase in the regulatory burden placed on those companies. Indeed, in the past years a wave of new regulatory measures

have restricted the freedom of tobacco, alcohol and food companies to produce, present, offer for sale, advertise and supply their products as they wish. The ensuing limitation of commercial freedom is considered by several governments as well as international and non-governmental organizations as necessary to protect an overriding public interest – that is, human health. The underlying idea behind most of these policies is that states should take care of people's health and therefore prohibit or restrict commercial and industrial activities that could be harmful to it.

As mentioned above, all these measures – which affect virtually all phases of the production chain (from manufacturing to supply) – also restrict the ability of tobacco, alcohol and food manufacturers to fully exploit their IP assets.

Measures relating to product presentation

The first category of measures relates to the presentation of tobacco, alcohol and food products. Generally speaking, all companies tend to present their goods in such a way as to induce consumers to make purchase decisions. Packaging is generally the privileged means to communicate such messages to prospective purchasers: trademarks, logos, colours, designs and even smells increasingly pervade the packaging in several industries. Therefore, it does not come as a surprise that more and more regulators and policy-makers around the world including the EU have started targeting the packaging of products perceived to be harmful to people's health.

The case of tobacco is particularly relevant. Regulatory measures have recently been proposed or adopted that aim to prevent tobacco companies from fully exploiting their packaging. In particular, such measures prohibit companies from fully displaying trademarks, designs, drawings, colours and other ornamental elements. The aim of these measures is to discourage consumption of what are considered to be harmful products, on the assumption that less exposure of existing and potential customers to tobacco brands and other packaging features reduces the chances of purchase.[3] The most striking examples within this category of measures,

[3] See Rebecca Tushnet, 'Gone in Sixty Milliseconds: Trademark Law and Cognitive Science' (2008) 86(3) *Texas Law Review* 508 (noting in particular that 'cognitive science is especially attractive to trademark law because trademark protection is premised on a psychological assumption: exposure to a mark will trigger ideas and emotions in the mind of a consumer').

as detailed below, are plain packaging and display bans on tobacco products. I will also briefly comment on a recent dispute regarding a packaging appropriation measure adopted by Iceland in the field of alcohol and consisting of a ban on the use of some appealing packaging features of cider cans.

Plain packaging

Also known as 'generic' or 'standardized' packaging, plain packaging requires that all forms of tobacco branding be labelled exclusively with simple, unadorned text. This entails that trademarks, graphics and logos be removed from cigarette packs, except for the brand name and variant, which are displayed in a standard font (identical for all brands in the market). In essence, plain packaging aims at standardizing the appearance of all cigarette boxes in order to make them unappealing,[4] especially for adolescents, thus reducing the prevalence and uptake of smoking.[5]

Thus, the practical effect of this measure is to prevent tobacco producers from showing the distinctive features of their trademarks, designs and copyrighted works on cigarette packs. In the eyes of the tobacco majors, this is a strong limitation on their commercial freedom, especially in those countries where almost all forms of tobacco advertising are prohibited and thus packaging has become their ultimate marketing tool. Indeed, cigarette packs, once opened, remain in the hands of final consumers and constitute a powerful means of 'mobile' advertising.[6]

[4] See Becky Freeman, Simon Chapman and Matthew Rimmer, 'The Case for the Plain Packaging of Tobacco Products' (2007) 103(4) *Addiction* 580; Alberto Alemanno and Enrico Bonadio, 'The Case of Plain Packaging for Cigarettes' (2010) 3 *European Journal of Risk Regulation* 268.

[5] Indeed, some independent scientific evidence shows that this measure – by eliminating logos, designs and other elements that are capable of inducing people to start smoking – is likely to reduce tobacco consumption. See Melanie Wakefield, Daniella Germain, Sarah Durkin, *et al.*, 'Do Larger Pictorial Health Warnings Diminish the Need for Plain Packaging of Cigarettes?' (2012) 107(6) *Addiction* 1159–1167; David Hammond, Samantha Daniel, Christine M. White, 'The Effect of Cigarette Branding and Plain Packaging on Female Youth in the United Kingdom' (2013) 52(2) *Journal of Adoloscent Health* 151–157.

[6] Plain packaging is endorsed by the FCTC, and more precisely by the guidelines to Articles 11 and 13 to this treaty, which expressly recommend that states consider adopting such measures. See *WHO Framework Convention on Tobacco Control: Guidelines for Implementation* (2011), 59, 95–96 ('Guidelines to the WHO FCTC').

Plain packaging has already been implemented outside Europe, and in particular by Australia.[7] Its adoption has also recently been announced by Ireland[8], the UK and New Zealand and is currently being taken into consideration by Scotland.[9] Also in March 2014 the EU adopted a revised Tobacco Products Directive. While the directive does not mandate plain packaging, it leaves EU Member States free to introduce such a measure, and Ireland and Scotland now seem committed in this regard.[10]

The above-mentioned Australian legislation has been challenged by leading tobacco majors such as British American Tobacco Australasia Limited ('BAT') and Philip Morris Asia Limited before both the High Court of Australia[11] and an ICSID arbitral panel constituted pursuant to a bilateral investment treaty (BIT) between Australia and Hong Kong.[12] A dispute is also currently pending at the World Trade Organization (WTO) with regard to the compatibility of the Australian measure with several IP provisions of the Agreement on Trade-Related Aspects of Intellectual Property Rights ('TRIPS Agreement') as well as of the Agreement on Technical Barriers to Trade ('TBT Agreement') because such measure would accord to imported tobacco products treatment less favourable than accorded

[7] Tobacco Plain Packaging Act 2011 (Cth), Ch. 2.

[8] See press release of the Irish Minister for Health James Reilly on 28 May 2013, available at www.dohc.ie/press/releases/2013/20130528.html.

[9] See the online edition of *The Scotsman*, 13 July 2013, available at www.scotsman.com/news/health/no-excuse-over-delay-on-tobacco-packaging-1-3009408.

[10] See the Directive 2014/40/EU of the European Parliament and of the Council of 3 April 2014 on the approximation of the laws, regulations and administrative provisions of the Member States concerning the manufacture, presentation and sale of tobacco and related products, 19 December 2012. The main feature of the EU legislation is a requirement for tobacco packs to show health warnings covering a minimum of 75% of the front and back surfaces starting from the top edge; such requirement seems very close to a generic packaging measure.

[11] In August 2012 the Australian proceedings came to an end with the High Court confirming that the measure did not amount to an expropriation of the tobacco companies' (intellectual) property and is thus compliant with the Australian Constitution (*JT International SA v Commonwealth* [2012] HCA 43). For a comment on this decision see Jonathan Liberman, 'Plainly Constitutional: The Upholding of Plain Tobacco Packaging by the High Court of Australia' (2013) 39(2) *American Journal of Law and Medicine* 361–381.

[12] See the Agreement between the Government of Hong Kong and the Government of Australia for the Promotion and Protection of Investments, signed on 15 September 1993, 1748 UNTS 385 (entered into force 15 October 1993).

to similar Australian products and would create unnecessary obstacles to trade.[13]

Thus far, legislation on plain packaging has been passed or proposed with reference to tobacco products. Yet there are speculations that plain-packaging legislation – or other packaging-related measures – may in the not-too-distant future spread to food, alcohol and other products perceived to be harmful, thus enlarging the range of IP rights owners hit by this marketing restriction. Indeed, there have already been moves in some countries. For example, Chile has recently proposed an amendment to its Food Health Regulation which would place 'STOP' signs on HFSS foods, such signs occupying no less than 20% of the main surface of the package.[14] Peru introduced a similar legislation in 2013, i.e. the Act to Promote Healthy Eating amongst Children and Adolescents, which aims at adding warnings such as 'high in calories', or 'high salt' on food products.[15] Also, Thailand has in place a liquor-labelling regime which mandates graphic warnings and accordingly shrinks the size of the labels.[16]

Alcohol packaging regulations: Iceland's experience

A particular packaging-related measure aimed at reducing the attractiveness of certain alcoholic products has also recently been adopted in Iceland. This measure was challenged in the *HOB-vìn ehf* case

[13] In particular, generic packaging could be deemed as a technical regulation more trade-restrictive than necessary in order to reduce tobacco consumption and thus protect public health, which would violate Article 2.2 of the TBT Agreement. Indeed, the introduction of plain packaging would require a scientific basis or any other sufficient technical evidence to demonstrate the causal link of such measure with its target. Yet, Australian authorities claim that such scientific basis exists in light of the strong evidence they claim to have collected.

[14] See the WTO press release following the latest meeting on 13 March 2013 of the Technical Barriers to Trade (TBT) Committee.

[15] Peru, Act 30.021 to Promote Healthy Eating Among Children and Adolescents, 13 May 2013.

[16] In particular, the Thai law requires labels to carry any of the following messages: (i) drinking alcohol causes hypertension liver cirrhosis; (ii) alcohol intoxication leads to accidents; (iii) drinking alcohol leads to unconsciousness and even death; (iv) drinking alcohol leads to inferior sexual performance; (v) drinking alcohol leads to adverse health effect and family problems; (vi) drinking alcohol is a bad influence on children and young people. It also requires the graphic health warning to be no less than 30–50% of the size of the alcohol container. The warning labels shall rotate every 1,000 packages. See the webpages of the Thai Alcohol and Tobacco Tax and Trade Bureau at www.ttb.gov/itd/thailand.shtml.

before the European Free Trade Association Court ('EFTA Court') which found the measure in question was not compliant with the Agreement on the European Economic Area.[17] The most interesting part of this dispute regards the refusal by the State Alcohol and Tobacco Company of Iceland ('ÁTVR') to authorize the marketing and sale of three cider products that had been legally manufactured and sold in Denmark. The reason for such refusal was that their packaging bore text and visual imagery in violation of a provision adopted by ÁTVR. That provision states that the text and images on alcohol packaging and labelling should not: contain loaded or unrelated information; suggest that the product enhances physical, mental, social or sexual functions; or offend people's general sense of propriety, for example by referring to violence, religion, pornography, illegal drugs, political views, discrimination or criminal conduct. ÁTVR stressed that the packaging of the products in question – which were marketed in stylish cans, featuring artful drawings including colourful illustrations of women's legs with some apparently naked skin – was 'evidently intended to make the products sensually appealing and challenging'.[18] The importer of the cans contested this decision. The case was then referred to the EFTA Court, which was asked to give an advisory opinion about the compatibility of the Icelandic provision with the EEA Agreement.[19] The EFTA Court noted that the refusal by ÁTVR had been based exclusively on a specific part of the rule in question, namely the part of the provision that prohibits the use of texts or visual imagery that offends people's general sense of propriety. Accordingly, it was found that the measure in

[17] *HOB-vín ehf v The State Alcohol and Tobacco Company of Iceland (ÁTVR)* (EFTA Court, E-2/12, 11 December 2012). For a timely comment on this case see Alberto Alemanno, 'The HOB-vín Judgment: A Failed Attempt to Standardise the Visual Imagery, Packaging and Appeal of Alcohol Products' (2013) 1 *European Journal of Risk Regulation* 101. The European Economic Area Agreement was signed on 2 May 1993, 1801 UNTS 3 (entered into force 1 January 1994) ('EEA Agreement') and extends portions of European Union law to European Economic Area countries including Iceland.

[18] *HOB-vín ehf v The State Alcohol and Tobacco Company of Iceland (ÁTVR)* (EFTA Court, E-2/12, 11 December 2012) [26].

[19] The EFTA Court has the task of interpreting the EEA Agreement with regard to the EFTA countries that are party to it, namely Iceland, Liechtenstein and Norway. EFTA is a free trade organization grouping Iceland, Liechtenstein, Norway and Switzerland. Thus, though not EU member states, Iceland, Liechtenstein and Norway are part of the EU internal market through the EEA Agreement. Switzerland instead opted to enter into bilateral agreements with the EU covering many areas, such as movement of persons, transport and technical barriers to trade.

question could not, under the EEA Agreement, be justified by a stringent public interest objective such as the protection of public health (ÁTVR had claimed in the proceedings that the ban in question could be justified by invoking the protection of consumers' health).

Even though the Icelandic provision has been condemned for being contrary to the EEA Agreement, this case shows that policy-makers have started targeting the packaging of alcoholic products, and they have done so with a view to reducing the market appeal of such products and thus reducing their consumption. Yet such measures – which aim at protecting not only public health but also morality and public order – inevitably restrict the ability of manufacturers to fully exploit their logos, designs or copyrighted drawings.

Display bans of tobacco products: Norway's experience

Display bans of tobacco products are another measure that prevents tobacco companies from fully exploiting their trademarks, designs and other elements affixed to packaging. This measure entails a ban on displaying tobacco products at points of sale, which means that tobacco products cannot be shown to potential purchasers.[20] Display bans have been adopted by several European countries such as Iceland, Norway, Ireland and Finland in the context of policies aimed at protecting public health.[21] The Norwegian measure, in particular, has been given a green light by the EFTA Court. On 12 September 2011, the EFTA Court delivered an advisory opinion confirming the compatibility of the Norwegian measure with the EEA Agreement. The Court found that the Norwegian display ban amounts to a restriction on the free movement of goods within the EEA, but that such restriction is justified as it protects public health by limiting the consumption of tobacco products (the ruling does not make reference to IP issues, though).[22]

[20] Display of tobacco products at the point of sale also constitutes a powerful means of advertising and promotion. As stressed by the Guidelines to the WHO FCTC (see n. 6 above, 94), display of products is a major tool for their promotion, including by stimulating impulse purchases, giving the impression that tobacco consumption is socially acceptable and making it more difficult for smokers to quit smoking.

[21] Iceland was the first country to introduce a display ban of tobacco products, in August 2001. Norway followed by introducing this measure on 1 January 2010, through an amendment to the 1973 Act relating to the Prevention of the Harmful Effects of Tobacco (the Tobacco Control Act). Ireland did the same in July 2009 and Finland in January 2012.

[22] *Philip Morris Norway AS v Staten/Helse-og omsorgsdepartementet* (EFTA Court, E-16/10, 12 September 2011). For a timely comment on this opinion see Alberto Alemanno,

Measures restricting advertising

A second category of IP restrictive measures relates to advertising.[23] The EU has already passed legislation prohibiting or restricting advertising of tobacco, alcohol and unhealthy food. For example, all tobacco advertising and sponsorship on television has been banned within the EU since 1991 under the Television Without Frontiers Directive.[24] This ban was extended by the Tobacco Advertising Directive, which took effect in July 2005 to cover other forms of media such as the internet, print media, radio, and sports events like F1. The ban was then extended by the Audiovisual Media Services Directive (AVMS Directive) to cover product placement.[25] The AVMS Directive also amends the Television Without Frontiers Directive in a number of areas including advertising of unhealthy foods and beverages in children's programmes, with the purpose of discouraging the consumption of harmful products by this category of consumers.[26]

Again, the effect of these measures is to prevent owners of IP rights from using their signs, designs or copyrighted works in advertising: take for example a tobacco manufacturer which had been using a licensed character in television ads for attracting consumers and has not been able to exploit it since the introduction of the ban on tobacco advertising; or those provisions of the AVMS Directive which prohibit not only the advertising of tobacco products but also the commercial communication relating to different goods by companies whose core business is tobacco, e.g. advertising of clothes by a tobacco major (these provisions therefore clarify that what is banned are the communication activities related to the tobacco brand itself, regardless of whether such brand is affixed on

'The Legality, Rationale and Science of Tobacco Display Bans after the Philip Morris Judgment' (2011) 4 *European Journal of Risk Regulation* 591.

[23] I am talking here about *stricto sensu* advertising. Indeed, the many ways in which companies present their products can also be considered as advertising in *its widest sense*.

[24] Council Directive 89/552/EEC of 3 October 1989 on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the pursuit of television broadcasting activities.

[25] Directive 2010/13 on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the provision of audiovisual media services (AVMS) [2010] OJ L95/1.

[26] See Articles 9(1)(e) and 9(2) of the AVMS Directive. For a critical comment of these provisions see Olivier Bartlett and Amandine Garde, 'Time to Seize the (Red) Bull by the Horns: The European Union's Failure to Protect Children from Alcohol and Unhealthy Food Marketing' (2013) 38 *European Law Review* 498–520.

products other than cigarettes).[27] To the eyes of the industry, said measures constitute a clear limitation of the IP owners' commercial freedom and in particular of the ability to use their protected asset in advertising.[28]

Limiting availability of products to consumers

Other restrictive measures relate to the supply of the products to final consumers. For example, some non-EU countries have limited the times during which alcoholic products are sold, or use authorization systems to limit the number of shops and places that can sell such products.[29] This category also includes measures that prohibit or make it more difficult to sell tobacco and alcohol to minors, for example bans of tobacco or alcohol vending machines[30] or bans on the sale of tobacco with or in sweets, snacks, toys or any other objects that appeal to minors.[31]

All these measures restrict the freedom of manufacturers/IP rights owners, and their distributors, to sell their IP-protected products or to choose innovative ways of supplying their products, and limit the number of final consumers available to such companies by excluding a category of potential purchasers. This also restricts the ability of such companies to show their trademarks and other IP assets to a larger range of current and prospective clients, thus limiting them in fully using and exploiting the said assets.

Measures related to manufacturing

Another category of restrictive measures relates to the manufacturing of the products in question. Take the bans or restrictions on the use of

[27] See Recital 88 and Articles 10(2) and 11(4)(a) of the AVMS Directive.

[28] See for example Article 5 of Directive 2008/95/EC of the European Parliament and of the Council of 22 October 2008 to approximate the laws of the Member States relating to trade marks (Codified version), which offers trademark owners the exclusive right, *inter alia*, to prevent others from affixing the sign to the goods or to the packaging thereof and using the sign in advertising.

[29] Countries which have restricted the availability of alcoholic products include Bangladesh, Brunei, some states of India and Pakistan.

[30] Vending machines also constitute a means of advertising or promotion (see WHO FCTC, Article 16). Several EU countries have banned vending machines, including Slovakia, Slovenia, Croatia, Greece, Cyprus, Estonia, Hungary, France, Latvia, Lithuania, Poland and Romania.

[31] These measures are recommended by Article 16 of the WHO FCTC.

certain ingredients, including trans-fats, in foodstuffs;[32] or the bans on the use of flavouring or colouring agents in tobacco and alcoholic products[33] which help make them more attractive.[34]

If a product or manufacturing process that includes the prohibited ingredient is patented, such a ban would make the patent meaningless as the producer/IP right owner would be prevented from properly using the invention. Concerns are growing, as patents covering food products and processes, and food and beverage recipes, are more and more frequently granted. Patent applications also show that some ingredients associated with energy and vitality, such as caffeine and taurine (which are increasingly viewed with suspicion by regulators),[35] have also been considered for use in tobacco products.

Plain packaging of tobacco products may also make pack-related patents and three-dimensional designs meaningless. For example, new Australian legislation requires that cigarette packs shall not contain an opening, such as a fliptop lid, that can be reclosed or resealed after the

[32] While Denmark and Finland have introduced limits to the amounts of trans-fats in foodstuffs, the EU has not yet done so. As stressed by Article 30(7) of the Regulation on the Provision of Food Information to Consumers (Regulation No. 1169/2011), the Commission, taking into account scientific evidence and experience acquired in Member States, shall submit a report on the presence of trans-fats in foods and in the overall diet of the EU population. The aim of the report shall be to assess the impact of appropriate measures that could allow consumers to make healthier food and overall dietary choices or that could promote the provision of healthier food options to consumers, including restrictions on the use of trans-fats.

[33] See Article 7 of the 2014/40/EU Directive of the European Parliament and of the Council on the approximation of the laws, regulations and administrative provisions of the Member States concerning the manufacture, presentation and sale of tobacco and related products, which states that 'Member States shall prohibit the placing on the market of tobacco products with a characterising flavour'. Examples of flavouring substances in tobacco products include benzaldehyde, maltol, menthol and vanillin: see *Guidelines to the WHO FCTC*, above n. 6, 39. Examples of colouring agents in tobacco products include inks (for example, imitation cork pattern on tipping paper) and pigments (for example titanium dioxide in filter material), above n. 6, at 40.

[34] As noted by the Guidelines to the WHO FCTC (see n. 6 above, 39), some tobacco products also contain added sugars and sweeteners (such as glucose, molasses, honey and sorbitol) which improve the palatability of tobacco products to tobacco users. The Guidelines to the WHO FCTC (at 40) also encourage states to introduce bans on ingredients in tobacco products that help to create the impression that the products have health benefits or that they present reduced health hazards (such ingredients include vitamin C and vitamin E, fruit and vegetables, amino acids and essential fatty acids).

[35] For example, France banned the well-known energy drink Red Bull for twelve years due to health authorities' concerns about unknown consequences of taurine (the ban was lifted in 2008).

pack is first opened.[36] It also requires that the outer faces of retail packaging shall not have any decorative ridges, embossing, bulges or other irregularities of shape or texture.[37] As noted by Gummow J in the decision of the High Court of Australia, which confirmed the lawfulness of plain packaging under the Australian Constitution, this regulatory measure denies the exploitation of the patent owned by BAT. BAT's patent covers an invention titled 'Smoking article packaging', and refers to a method of resealing the contents in that packaging.[38] The measure also makes meaningless BAT's registered design protecting the so-called 'ribbed pack', the characteristic features of which reside in its particular shape and configuration.[39]

The compatibility of the regulatory measures with IP rights

This analysis demonstrates that measures aimed at restricting the manufacture, presentation, advertising and supply of tobacco, alcohol and unhealthy food and beverages can potentially jeopardize the ability of manufacturers to exploit their IP. They may do so in different phases of the production chain that eventually brings the product into the hands of consumers, from the manufacturing process to the supply to end-users. Do such interferences violate IP rights?[40] On the one hand, manufacturers may stress that as these restrictive measures prevent them from fully using their IP assets, they encroach upon the rights offered to them by trademark, patent and design registration law, as well as copyright law provisions.

[36] Tobacco Plain Packaging Regulations 2011 (Cth), reg 2.1.1.

[37] Tobacco Plain Packaging Act 2011 (Cth), s 18(1)(a).

[38] British American Tobacco (Investments) Limited, *Smoke Article Packaging*, Australian Patent No. 2001258572 (22 May 2001).

[39] A category that does not have a direct impact on IP is that of measures governing the consumption of the products in question. Examples include bans on smoking in public spaces already adopted in many EU countries as well as price increases and consumption taxes (which are introduced by governments to make unhealthy products such as alcohol and tobacco less affordable). Whilst such measures do not jeopardize the ability of IP rights owners to use their intangible assets – they just limit the use of the products by final consumers – they might however have an indirect impact on IP as they may cause manufacturers/IP rights owners to lose sales. This in turn makes it more difficult for them to recoup the investments needed to come up with the relevant logos, designs or inventions and/or obtain the relevant IP protection, that is trademark or patent registration.

[40] We have already seen that in the *HOB-vín ehf* case the EFTA Court found the Icelandic provision in question in violation of the EEA Agreement. However, the rules examined by the EFTA Court in that case were not IP related.

Yet, it could also be argued that these measures do not encroach upon the rights offered to IP rights owners and therefore cannot be considered legally incompatible with the IP rights system. A look at most national, EU and international provisions on the scope of IP protection reinforces this belief.[41] Such provisions clarify that IP rights holders do not have a positive right to actually use the IP assets – they are just given a *ius excludendi alios*, that is the negative right to prevent third parties from using the asset.[42] The use of trademarks, designs, inventions and copyrighted works can thus be prohibited or restricted by measures adopted on public interests grounds, such as the ones analysed in this chapter. This is exactly what has occurred in many jurisdictions as far as tobacco products are concerned. Indeed many countries (including European ones), in the context of public health protection programmes, have adopted advertising restrictions entailing a prohibition of the use of tobacco trademarks under certain circumstances. These measures have not raised any doubts about their compatibility with national, European and international provisions protecting trademarks and other IP rights. This is due, I believe, to the fact that most IP laws in the world, including EU IP legislation, do not offer IP rights holders any positive right to use their protected assets.[43]

The above argument is disputed by some commentators, who consider it too formalistic and mistaken in permitting a right of registration but at the same time denying a right of use. Such an interpretation is argued as risking the undermining of the IP system and contrary to the spirit of IP legislations.[44] According to this school of thought, therefore, IP

[41] See, e.g., Directive 2008/95/EC of the European Parliament and of the Council of 22 October 2008 to approximate the laws of the Member States relating to trade marks [2008] OJ L 299/25, Article 5(3); TRIPS Agreement, Art. 16(1); Directive 98/44/EC of the European Parliament and of the Council of 6 July 1998 on the legal protection of biotechnological inventions [1998] OJ L 213/13, recital 14.

[42] See also Mark Davison, 'The Legitimacy of Plain Packaging under International Intellectual Property Law: Why there is no Right to Use a Trademark under either the Paris Convention or the TRIPS Agreement' in Andrew Mitchell, Tania Voon and Jonathan Liberman (eds.), *Public Health and Plain Packaging of Cigarettes: Legal Issues* (Edward Elgar, 2012), noting that neither the TRIPS Agreement nor the Paris Convention for the Protection of Industrial Property, opened for signature 14 July 1967, 828 UNTS 306 (entered into force 26 April 1970), expressly provide for a right to use IP rights and in particular trademarks.

[43] See for example Article 5 of Directive 2008/95/EC of the European Parliament and of the Council of 22 October 2008 to approximate the laws of the Member States relating to trade marks (Codified version).

[44] See Patrick Basham and John C. Luik, *Erasing Intellectual Property: 'Plain Packaging' for Consumer Products and the Implications for Trademark Rights* (Democracy

registrations confer an implied positive right to use the protected asset.[45] This reasoning seems flawed though. Indeed, the right to commercially use a sign or an invention arises not from the registration (either directly nor indirectly),[46] but is rather a characteristic intrinsic to the freedom to carry out commercial activities in the market,[47] such freedom being capable of being restricted on public interest grounds, such as the protection of public health.

That IP rights, and in particular trademarks, offer their owners negative rights has been reaffirmed by Advocate General Geelhoed in his *Opinion in British American Tobacco*,[48] where he stated:

> [T]he essential substance of a trademark right does not consist in an entitlement as against the authorities to use a trademark unimpeded by provisions of public law. On the contrary, a trademark right is essentially a right enforceable against other individuals if they infringe the use made by the holder.[49]

Following this interpretation, it seems that the restrictive measures highlighted in this chapter – that is, 'provisions of public law' – would not breach IP rights as they do not authorize third parties to exploit IP protected assets; they merely consist of lawful restrictions on the ability of rights owners to use their own signs, logos or copyrighted works. Yet, despite this limitation, rights holders could still exercise the

Institute, Washington Legal Foundation, 2011), 22–29. See also Daniel Gervais, *Analysis of the Compatibility of Certain Tobacco Product Packaging Rules with the TRIPS Agreement and the Paris Convention* (30 November 2010), Physicians for a Smoke-Free Canada, available at www.smoke-free.ca/trade-and-tobacco/Resources/Gervais.pdf, 11–12 ('Gervais Report'); Annette Kur, 'The Right to Use One's Own Trade Mark: A Self-evident Issue or a New Concept in German, European, and International Trade Mark Law?' (1996) 4 *European Intellectual Property Review* 203; Memorandum from Lalive to Philip Morris International Management SA, 23 July 2009, available at www.smoke-free.ca/plain-packaging/documents/industry-responses/LALIVE_Analysis_23_July_2009.pdf.

[45] See, as far as trademarks are concerned, the Gervais Report, *ibid.*

[46] This is particularly true in the field of copyright. Indeed, in most jurisdictions copyright legislation offers rights owners exclusive rights from the date the work is created, regardless of any registration.

[47] See Kur, n. 44 above, 199.

[48] See *R v Secretary of State for Health, ex parte British American Tobacco (Investments) Ltd and Imperial Tobacco Ltd (Advisory Opinion of Advocate-General Geelhoed)* (C-491/01) [2002] ECR I-11453; Directive 2001/37/EC of the European Parliament and of the Council of 5 June 2001 on the approximation of the laws, regulations and administrative provisions of the Member States concerning the manufacture, presentation and sale of tobacco products [2001] OJ L 194/26.

[49] (C-491/01) [2002] ECR I-11453, *ibid.* [266].

right to prohibit the misappropriation of their assets by unauthorized third parties.

How to use IP regimes for encouraging the production of healthier food and beverages: three proposals

The previous sections discussed the (negative) impact on IP of certain regulatory measures aimed at discouraging the manufacture, sale and consumption of harmful products, whether they be cigarettes, alcohol or unhealthy food or beverages. It has been argued that such an impact, despite being negative, entails no violation of IP rights.

It is now time to verify if, and to what extent, IP regimes (in and outside Europe) may contribute to incentivizing companies to manufacture and market healthier products in the fields of food and beverages. The need to supply customers with healthier food and beverages constitutes an urgent need as many people in both industrialized and developing countries struggle with obesity (which is mostly caused by unhealthy diets), its related diseases, and other illnesses caused by consumption of unhealthy products.

The IP system may play a role, including in the EU, in fighting obesity and related illnesses. Three proposals are put forward, which aim at amending patent procedures for inventions related to foodstuffs and beverages. Such proposals seem to be pertinent and timely as food- and beverages-related patents are increasingly granted around the world. There is little doubt that food and beverages recipes can be patented provided that they comply with patentability requirements, as has been confirmed recently by the Supervisory Patent Examiner of the United States Patent and Trademark Office.[50]

The first proposal would require food and beverage manufacturers that want to patent their products or processes to show that the products or processes contain or use healthy ingredients. The same burden is the focal point of the second and third proposals; yet in these cases fulfilling such a requirement would not constitute the *sine qua non* condition for patent protection. Rather, it would just aim at speeding up or facilitating the patenting process for foods and beverages that are considered healthy.

[50] See Larry Taravano, 'Can Recipes be Patented?', *InventorsEye* (The USPTO's bimonthly publication for the independent inventor community), June 2013, available at www.uspto.gov/inventors/independent/eye/201306/ADVICE.jsp.

Requiring food and beverage patent applicants to demonstrate use of healthy ingredients

The first proposal would be to make the patenting of inventions related to foodstuffs and beverages subject to both (i) the presence in the relevant products or processes of macronutrients including proteins, vitamins and carbohydrates; and (ii) a significant reduction of unhealthy ingredients such as salt, fat and sugar. In other words, this proposal would require applicants to show that their foodstuffs and beverages are healthy and do not contain harmful ingredients or components. Further, a patent covering an invention that does not satisfy the proposed conditions should be invalidated. It is believed that such a requirement would be a workable one, especially in light of the fact that some patents covering healthy food have been granted in the past. The US Patent No. 5260087 for an invention entitled 'Fat and egg yolk substitute for use in baking and process for using substitute' is a case in point:[51] indeed, as is explained in the patent specification, fats and eggs produce desirable taste and sensory qualities in the baked goods, but also contribute much fat and cholesterol to the baked items. And the main purpose of this invention is to provide a low-fat compound which can be used in baking cookies and cakes as a substitute for fats and egg yolks, while still producing the desired product taste and sensory qualities. The invention further aims to provide a very low-fat compound and a method of using it that will not only produce a tasty and tender baked item, but will also contribute to increased item shelf life.

The requirement in question could be justified by relying on a provision contained in many international, regional and national patent legislations that state that countries are allowed to exclude from patentability inventions that are contrary to *ordre public* and morality. For example, Article 53(a) of the European Patent Convention states that 'European patents shall not be granted in respect of . . . inventions the commercial exploitation of which would be contrary to "ordre public" or morality.'[52] It could indeed be argued that inventions related to unhealthy food and beverages should be excluded from patentability on the above grounds (also, the concept of 'ordre public' could be broadened by extending the list of grounds to include other reasons of overriding public interest, such as health protection). The proposal also seems to

[51] This US patent was filed in July 1992 and has therefore expired.

[52] Convention on the Grant of European Patents, opened for signature 5 October 1973, 1065 UNTS 199 (entered into force 7 October 1977); see also TRIPS Agreement, Article 27(2).

be in line with the very purpose of the patent system, which is to incentivize the realization of inventions that are really useful to societies.

From a procedural perspective, I would propose that applicants make a reasonable, written assertion that the products or processes for which they seek a patent are healthy. Food and beverage products and processes for which health benefits are immediately clear would just need a simple statement. More detailed clarifications should be required for less obviously healthy inventions – and their healthiness should be confirmed by the patent office.[53]

Having said that, it might be argued that this proposal would be contrary to Article 62(1) of the TRIPS Agreement, which states that 'Members may require, as a condition of the acquisition or maintenance of the intellectual property rights . . . compliance with *reasonable* procedures and formalities.'[54] Thus, making the patenting of food- and beverage-related inventions subject to the above-mentioned requirement may amount to an unreasonable condition on the acquisition or maintenance of the relevant patent. Also, it may be noted that introducing this condition only with reference to food and beverages related inventions would violate the principle of non-discrimination between fields of technology pursuant to Article 27(1) of the TRIPS Agreement. This provision clarifies that 'patents shall be available and patent rights enjoyable without discrimination as to . . . the field of technology'.

Yet it is arguable that this proposal would not constitute an unreasonable condition on the acquisition of patents on food- and beverage-related inventions as it would not place excessively heavy burdens on patent offices and applicants. The objection that patent offices and judges would not be well-equipped to verify whether the product or process in question is healthy (indeed one may note that such a task

[53] These suggestions build upon some observations made by the Californian IP lawyer Eric Lane in connection with green technologies: see Eric Lane, 'Building the Global Green Patent Highway: A Proposal for International Harmonization of Green Technology Fast Track Programs' (2012) 27(3) *Berkeley Technology Law Journal* 1119, at 1147–1150; see also Lane, *Clean Tech Intellectual Property: Eco-marks, Green Patents, and Green Innovation* (Oxford University Press, 2011), 218–226.

[54] (Emphasis added). This provision has been interpreted by a WTO Panel in Canada – Term of Patent Protection, WT/DS170/R, Report of 5 May 2000. The Panel held that some Canadian patent law provisions (which required applicants to resort to delays such as abandonment of the application, reinstatement, non-payment of fees and non-response to a patent examiner's report) would be inconsistent with the general principle that procedures should not be unnecessarily complicated, as expressed in *inter alia* Article 62.1 of the TRIPS Agreement (paras 6.117–6.119).

exceeds the skills of patent offices) could be overcome. For example, patent officers could team up with experts (such as professors in food science) who could be questioned about technical issues. The latest developments in food safety would help overcome the scientific, social and cultural uncertainties that have thus far surrounded the distinction between healthy and unhealthy food. Indeed, efforts have recently been made by regulators to devise an appropriate categorization system that allows for the differentiation of foods which are high in fat, saturated fat, salt or sugar.[55] For example, the UK Food Standards Agency has developed a nutrient-profiling model as a tool for categorizing foods on the basis of objective criteria and in particular their nutrient content.[56] This model, which has been adopted by the UK media and communications regulator Ofcom to regulate the advertising and promotion of foods to children, uses a simple scoring system that recognizes the contribution made by beneficial nutrients that are important in a child's diet (i.e. protein, fibre, fruit and vegetables, and nuts) and puts at a disadvantage foods with ingredients that children should eat less of (saturated fats, salt and sugars).[57] A similar scoring system could be used in patenting procedures for foodstuffs and beverages, with applicants failing to reach a certain threshold being refused the patent.

Also, the proposal in question should be considered reasonable because it aims at pursuing an overriding public interest, which is to incentivize the production of healthy food and beverages and thus fight

[55] Generally speaking, it is widely accepted that energy-dense, micronutrient-poor foods, which are high in fat, sugar or salt are not nutritious and may be detrimental to human health: see Marine Friant-Perrot and Amandine Garde, 'From BSE to Obesity – EFSA Growing Role in the EU's Nutrition Policy' in Alberto Alemanno and Simone Gabbi (eds.), *Foundations of EU Food Law and Policy – Ten Years of the European Food Safety Authority* (Farnham: Ashgate, 2014).

[56] See the UK Food Standards Agency webpages at www.food.gov.uk/northern-ireland/nutritionni/niyoungpeople/nutlab/#.Ugn2GVMgYfo.

[57] Some progress has also been made at EU level. For example, despite the difficulties experienced by the European Food Safety Authority (EFSA) in performing its nutrition-related tasks, said agency has nonetheless provided scientific advice on the establishment of tolerable upper levels of intakes (UL) for vitamins and minerals representing the highest level of daily intake likely to pose no risk to health (see *Tolerable Upper Intake Levels for Vitamins and Minerals* by the Scientific Panel on Dietetic Products, Nutrition and Allergies (NDA) and Scientific Committee on Food (SCF), February 2006, available at www.efsa.europa.eu/it/ndatopics/docs/ndatolerableuil.pdf). Also, in 2010 EFSA established dietary reference values for carbohydrates, dietary fibre, fats and water (see EFSA press release of 26 March 2010, available at www.efsa.europa.eu/en/press/news/nda100326.htm).

obesity and related illnesses. As is well-known, the furtherance of public interests is one of the objectives pursued by the TRIPS Agreement, Article 8 of which states that:

> Members may, in formulating or amending their laws and regulations, adopt measures necessary to protect *public health* and *nutrition*, and to promote the public interest in sectors of vital importance to their socio-economic and technological development.

It could be further argued that the proposed measure does not constitute discriminatory treatment vis-à-vis the food and beverage sector, but that it boils down to lawful differential treatment that is necessary to meet a socially sensitive objective in specific fields – here, the protection of public health. The distinction between unlawful 'discrimination' and lawful 'differential treatment' in the field of IP rights has already been stressed by the WTO Panel in *Canada – Patent Protection for Pharmaceutical Products*.[58] In that case the Panel stated that 'Article 27 does not prohibit bona fide exceptions to deal with problems that may exist only in certain product areas.' In this respect, Frederick Abbott points out that if specific rules applicable only to pharmaceutical patents are necessary to address important public interests such as the protection of public health, 'this does not constitute "discrimination" against the field of pharmaceutical technology. It constitutes recognition of legitimate public interests in differential treatment'.[59] This statement has been made in relation to pharmaceutical inventions, but it could arguably also be invoked in relation to food- and beverage-related products and processes. Indeed the proposed condition aims to meet socially relevant aims in the field of public health, especially the fight against obesity and related diseases.

Fast-track procedures for healthy food and beverage patent applications

The second proposal is to set up a fast-track procedure for patent applications covering foodstuffs and beverages containing macronutrients or other

[58] Panel Report, *Canada – Patent Protection of Pharmaceutical Products*, WTO Doc WT/DS114/R (17 March 2000) [7.92].

[59] See Frederick Abbott, 'Compulsory Licensing for Public Health Needs: The TRIPS Agenda at the WTO after the Doha Declaration on Public Health' (Occasional Paper No. 9, Friends World Committee for Consultation, February 2002), 49–50, available at www.cptech.org/ip/health/cl/quno-op9.pdf.

healthy ingredients so as to provide an expedited examination of the relevant patentability requirements. This proposal would again aim at protecting public health. Analogous procedures are being or have been established in the field of green technologies in the United States, the United Kingdom, South Korea, Israel, Canada and Japan.[60]

Applicants that ask for this fast-track procedure must show that their products or processes both contain healthy ingredients and lack unhealthy components (again, should applicants fail to reach a certain scoring threshold, the patent would be refused), and in cases where the health benefits are clear a brief statement by the claimant would satisfy this requirement.

It would be wise to devise this fast-track procedure in the context of an international treaty. This would be recommended in order to overcome possible differences between national procedures (which could vary widely in their rules and requirements). As a matter of fact, such disparities would make participation in multiple fast-track programmes expensive and lengthy, as applicants who want to protect their inventions in multiple jurisdictions would have to comply with many different rules. An international harmonized fast-track programme, with similar rules and requirements, would instead eliminate substantial burdens on applicants and thus speed up and make cheaper the patenting process for healthy food and beverage products. It would therefore also boost participation. A similar proposal has already been put forward with regard to fast-track programmes for green technologies-based inventions.[61]

What should be avoided is the setting up of a fast-track programme based on a rigid classification system that 'crystallizes' the categories of inventions that are eligible for fast-track procedures. The risk of such a system might be that foodstuffs or beverages containing healthy ingredients or constituents not mentioned in a particular category may not be eligible as they do not fall into one of the preselected classifications. Also, additional burdens on applicants should be avoided, such as conducting prior article searches and analysis. In such a way the entire process would be accelerated.[62] Such a system and such requirements would

[60] The first country to launch this programme was the UK in May 2009 (see press release, UK Intellectual Property Office, 'UK "Green" Inventions to get Fast-Tracked through Patent System', available at www.ipo.gov.uk/about/press/press-release/press-release-2009/press-release-20090512.htm).

[61] Lane, 'Building the Global Green Patent Highway', n. 53 above, 1160–1170.

[62] Again these suggestions build upon some observations made by Eric Lane in connection with green technologies: see *ibid*., 1138–1145.

surely amount to 'reasonable procedures and formalities', as required by Article 62(1) of the TRIPS Agreement, as they would speed up and make less costly and time-consuming the whole patent procedure for food- and beverage-related inventions. Again, in order to overcome the objection that patent offices would not be well-equipped to verify whether a food- or beverage-related invention is really healthy, it would be advisable to partner patent officers with technical experts able to distinguish and categorize foods on the basis of objective criteria, and in particular their nutrient content. Also, the proposed system would not violate the above-mentioned Article 27(1) of the TRIPS Agreement for the reasons already highlighted in the previous section.

Exempting healthy food and beverage patent applications from fees

The third proposal would entail exempting applicants for patents covering healthy food- and beverage-related inventions from paying the patent procedures fees – or at least significantly reducing them (again, applicants should show that their foodstuffs and beverages are healthy and do not contain harmful ingredients or components). This proposal would therefore aim at facilitating the patent protection of healthy foodstuffs and beverages. Indeed, patent fees may sometimes be unaffordable, especially for small and medium-sized enterprises. Take for example the high number of fees required by the European Patent Office, for example filing fees, search fees, fees per designated state, fees per claim over ten claims, examination fees and a fee for the patent grant and printing.

This proposal could also be 'merged' with the previous one. For example, countries particularly keen on protecting public health could both set up a fast-track patent procedure for healthy food and beverages and exempt applicants from paying the relevant fees (or greatly reduce them).

Conclusion

In the past years new regulatory actions adopted in Europe and beyond have tended to restrict the freedom of tobacco, alcohol and food companies to produce, present, offer for sale, advertise and supply their products as they wish, limiting their commercial freedom. Yet such measures are considered by many governments and international and non-governmental organizations as necessary to protect an overriding public interest, that is, human health. The measures in question,

however, jeopardize the ability of producers to fully use and exploit their IP assets. Yet, such inability does not necessarily mean that these measures encroach upon IP rights. Indeed, the negative nature of these rights – which give their owners the power to prevent unauthorized uses of their assets – allows states to take regulatory IP restrictive action on public interest grounds.

Furthermore, national patent laws (within and outside Europe) could be modified in such a way as to protect public health, especially in the field of foodstuffs and beverages. The proposals put forward in this chapter aim at amending patent procedures with a view to eventually encouraging the manufacture and entry into the market of foodstuffs and beverages that contain healthy ingredients and constituents. As demonstrated, these proposals may be compliant both with the aim of the patent system and with several provisions, including patent-related rules, of the TRIPS Agreement.