

How to Protect Foods and Foodways as Intangible Properties Effectively in the Republic of Korea

Gyoocho Lee (Professor of Law; Chung-Ang University School of Law in Seoul, Republic of Korea)

Abstract

This paper aims in protecting foods and foodways as intangible properties effectively on basis of cultural heritage laws and IP laws in Korea. Nestle, a multi-national company, applied for and obtained, patents for the recipe making Kimchi mixed with salted seafood in 14 countries 3 decades ago. In this regard, this paper will explore how to strike a balance between traditional knowledge and cultural law protection regimes, focusing on the Kimchi case.

[Table of Contents]

Introduction

I. Active Ways of Protection of Foods and Foodways

1. Active Ways of Protection of Foods and Foodways under IP Regime

a. Patents of Foods and Foodways

b. Unfair Competition Law

A. Unfair Competition

B. Trade Secrets of Foods and Foodways

c. GIs of Foods and Foodways

A. Geographical Indications and Traditional Knowledge

B. Legal Sources and Current Development of GIs in Korea

C. GIs Protection under the Korean Trademark Act

D. GIs Protection under the Korean Unfair Competition Prevention Act

E. Protection of PGIs under the Korean Act on Quality Control of Agricultural and Fishery Products

2. Active Ways of Protection of Foods and Foodways under Non-IP Regime

a. Cultural Heritage Protection Act

b. Act on Conservation and Use of Biological Diversity

c. Voluntary Escrow of Recipes or Information on Foods under the Act on the Promotion of Collaborative Cooperation between Large and Small-Medium Enterprises

II. Passive Ways of Protection of Foods and Foodways under IP Regime

1. Patents of Foods and Foodways

a. Patentability of Foods and Foodways

b. Nestle's Kimchi-Related case

2. International Trademark Classification of Food (Nice Classification)

Conclusion

[Appendices]

Introduction

Richard D. Alba, in *Ethnic Identity: The Transformation of White America* (1990) writes that "[e]thnic culture embraces the patterned, commonplace actions that distinguish members of one ethnic group from another, including food, language, and holiday ceremony."¹ Hence, traditional foods, including their recipes, and foodways can be subject-matters of protection on basis of the Cultural Heritage Protection Act Convention for the Safeguarding of the Intangible Cultural Heritage, and several laws related to intangible properties such as Patent Act, Trademark Act, the Act on Unfair Competition Prevention and Trade Secret Protection, and the Act on Quality Control of Agricultural and Fishery Products. This paper aims in protecting foods and foodways as intangible properties effectively on basis of cultural heritage laws and IP laws in Korea.

In 1983, a multi-national company applied for patents for a recipe making food similar to Kimchi in 15 countries including South Korea. Kimchi is 'a traditional fermented Korean side dish made of vegetables (mainly cabbage or radish) with a variety of seasonings. Kimchi's history in Korea dates back to the 7th century when pickling had been first used.

Definitely, the incident of 1983 drew attention from the Korean government. IP law systems sometimes conflict with the protection afforded based on the Korean Cultural Heritage Office and the UNESCO. This paper will explore how to strike a balance between IP law and cultural law protection regimes in passive and active ways.

The Article explores the possibility that traditional food and foodways can be protected on basis of IP laws because intellectual property covers traditional knowledge, geographical indications, and trade secrets. The Framework Act on Intellectual Property defines the term "new intellectual property" as "intellectual property that appears in new fields in line with economic, social or cultural changes or the development of science and technology." Therefore, the term "intellectual property right" means "any right relating to intellectual property recognized or protected

¹ Richard D. Alba, *Ethnic Identity: The Transformation of White America* 76 (1990). In the same context, see Milton M. Gordon, *Assimilation in American Life* 32 (1964) (Having observed that "[c]ulture, as the social scientist uses the term, refers to the social heritage of man-the ways of acting and the ways of doing things which are passed down from one generation to the next, not through genetic inheritance but by formal and informal methods of teaching and demonstration."); Larry L. Naylor, *Culture and Cultural Groupings*, in Larry L. Naylor, ed., *Cultural Diversity in the United States* 7 (1997) (Stating that "[t]raditionally, anthropologists have used culture to describe groups of people inhabiting certain geographical areas who share beliefs, behaviors, customs, or a total way of life.").

according to Acts and subordinate statutes, treaties, etc.” In other words, the term “intellectual property” is referred to as knowledge, information, technology, the expression of thoughts or feelings, the indication of business or goods, varieties of organism or genetic resources and other intangibles created or discovered by creative activities, experience, etc. of human beings, the value of property of which may be realized. Especially, the paper will point out that the development of geographical indications under the Trademark Act and the Act on Quality Control of Agricultural and Fishery Products can contribute to preservation and expansion of traditional knowledge because traditional knowledge has some bearing on human or natural resources related to specific geographical location.

Finally, the research will propose how to protect foods and foodways as intangible properties effectively in Korea, focusing on IP protection of traditional knowledge and preservation and expansion of traditional knowledge as cultural heritage.

I. Active Ways of Protection of Foods and Foodways

1. Active Ways of Protection of Foods and Foodways under IP Regime

a. Patents of Foods and Foodways

Export of the Korean agricultural food has amounted to 5.6 billion dollars as of 2016.² As the Korean cuisine ("hansik" in Korean) becomes popular globally, patent applications based on the Korean foods and recipes have been increasing.³ For instance, about 50 Kimchi-related patent applications have been filed annually for recent 10 years. Among them, technology increasing flavor and taste of Kimchi holds 39% out of total number of a decade-long Kimchi-related patent application and the Korean food and recipes which strengthen functionality by adding specific substances or ingredients for the purpose of prevention or cure of diseases were ranked the second as 30%.⁴ Article 2(1) of the Korean Patent Act⁵ defines "inventions" as "highly advanced creation of technical ideas utilizing the laws of nature." For a patent registration, an invention must satisfy the basic criteria of industrial applicability,

² <http://reporter.korea.kr/newsView.do?nid=148808023> (last visit on May 2nd, 2016).

³ Id.

⁴ Id.

⁵ Act No. 13096, revised on January 28th, 2015 and effective since July 29th, 2015.

novelty, and non-obviousness.^{6 7} Improvement of traditional foods and recipes can be protected under patent system if it meets requirements for patentability.

Since September 1990, the inventions of foods and table luxuries have become subject-matters of patent.⁸ In this regard, the following case needs to be discussed.

In a trial to invalidate the patent registration of the method of producing cane ice cream⁹ (the Korean Patent No. 1269215) before the Korean IP Trial and Appeal Board, the Board ruled that its patent was invalid because the cane ice cream was revealed via the Internet prior to the patent application of the method of producing cane ice cream.¹⁰ The patent of the cane-shaped pop corns filled with ice cream was invalidated due to lack of novelty.

[Figure 1] Korean cane ice cream



Source: <http://www.hankyung.com/news/app/newsview.php?aid=2014112636077> (last visit on May 1st, 2016)

[Figure 2] Drawing of cane ice cream

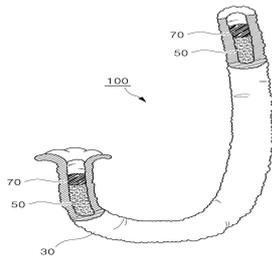
⁶ Article 29 of the Korean Patent Act.

⁷ Chaho Jung, Nari Lee & Hyewon Ahn, *Chapter 2 Patents*, in Byung-Il Kim and Christopher Heath, *Intellectual Property Law in Korea*, § 2.02, pp. 21-25 (2nd ed. 2015); Ji-Hyun Park, South Korea, in Paul Goldstein & Joseph Straus, *Intellectual Property in Asia* 262 (2009).

⁸ Act No. 4207, revised on January 13th, 1990 and effective since September 1st, 1990.

⁹ The Korean Patent Application No. 1020120093968 (filed by Chunho Cho on August 27, 2012); The Korean Patent Registration No. 1012692150000 (registered on May 22, 2013). The name of the invention was "Method of manufacturing stick typed soft ice cream."

¹⁰ The Ruling rendered by the Korean IP Trial and Appeal Board on September 30th, 2014 (Case No. 2013 Dang 1869).



Source: <http://kpat.kipris.or.kr/kpat/biblioa.do?method=biblioFrame> from the KIPO home page (last visit on May 1st, 2016)

b. Unfair Competition Law

A. Unfair Competition

The Korean Cane Ice Cream can be protected pursuant to the Unfair Competition Prevention and Trade Secret Protection Act in Korea.¹¹ In December 4th, 2014, Seoul Central District Court temporarily enjoined the defendant from selling his goods because the defendant copied the shape of goods of the plaintiff's.¹²

B. Trade Secrets of Foods and Foodways

¹¹ Act No. 13844, revised on January 27th, 2016 and effective since the same date.

¹² Article 2, subparagraph 1 item (i) of the Unfair Competition Prevention Act includes the following as acts of unfair competition:

"(i) An act of transferring or lending goods whose shape has been copied (referring to the form, image, color, gloss, or any combination of these, including the shape of any test product and the shape in goods brochure; hereinafter the same shall apply) from the goods manufactured by any other person; exhibiting such goods for transfer or lending; or importing or exporting such goods: Provided, That either of the following acts shall be excluded herefrom:

(i) An act of transferring or lending goods whose shape has been manufactured by counterfeiting the shape of the other goods for which three years have elapsed from the date on which the shape of the other goods, including the production of the prototype, was completed; exhibiting such goods for transfer or lending; or importing or exporting such goods;

(ii) An act of transferring or lending goods whose shape has been manufactured by counterfeiting the common shape of goods that are identical to the goods manufactured by any other person (where the goods of the same kind are nonexistent, referring to other goods whose function or utility is identical or similar to the relevant goods); exhibiting such goods for transfer or lending; or importing or exporting such goods."

http://news.chosun.com/site/data/html_dir/2013/12/05/2013120500117.html (last visit on March 1st, 2016).

Traditional foods and recipes owned by a specific family can be protected as a trade secret.

The term "trade secret" means information, including a production method, sale method, or useful, and technical or business, information for business activity, that is not known publicly, is the subject of *reasonable* effort to maintain its secrecy, and has independent economic value¹³ Prior to the revision of the Unfair Competition Prevention and Trade Secret Protection Act (hereinafter "Unfair Competition Prevention Act") in 2015, the Act defines it as "information, including a production method, sale method, or useful, and technical or business, information for business activity, that is not known publicly, is the subject of *considerable* effort to maintain its secrecy, and has independent economic value." In other words, by virtue of the 2015 revision of the Unfair Competition Prevention Act,¹⁴ the test to maintain secrecy of a trade secret is lowered so as to protect small and medium-sized businesses who do not have internal system and financial resources sufficient to protect their trade secrets. Moreover, Article 3 of the Unfair Competition Prevention Act refers to "infringement of trade secrets" as follows:

(a) An act of acquiring trade secrets by theft, deception, coercion or other improper means (hereinafter referred to as "act of improper acquisition"), or subsequently using or disclosing the trade secrets improperly acquired (including informing any specific person of the trade secret while under a duty to maintain secrecy; hereinafter the same shall apply);

(b) An act of acquiring trade secrets or using or disclosing the trade secrets improperly acquired, with knowledge of the fact that an act of improper acquisition of the trade secrets has occurred or without such knowledge due to gross negligence;

(c) An act of using or disclosing trade secrets after acquiring them, with knowledge of the fact that an act of improper acquisition of the trade secrets has occurred or without such knowledge due to gross negligence;

(d) An act of using or disclosing trade secrets to obtain improper benefits or to damage the owner of the trade secrets while under a contractual or other duty to maintain secrecy of the trade secrets;

(e) An act of acquiring trade secrets, or using or disclosing them with the knowledge of the fact that they have been disclosed in the manner provided in item (d) or that such disclosure has been involved, or without such knowledge due to gross negligence;

¹³ Article 2, subparagraph 2 of the Unfair Competition Prevention and Trade Secret Protection Act (Act No. 13844, revised on January 27th, 2016 and effective since the same day).

¹⁴ Act No. 13081, revised on January 28th, 2015 and effective since July 29th, 2015.

(f) An act of using or disclosing trade secrets after acquiring them, with the knowledge of the fact that they have been disclosed in a manner provided in item (d) or that such disclosure has been involved, or without such knowledge due to gross negligence.

Hence, as mentioned above, traditional foods and recipes owned by a specific family can be protected as a trade secret. However, traditional food and foodways are not usually protectable as trade secrets because they do not meet the requirement as to whether their holder(s) has(have) made reasonable effort to maintain their secrecy. Nonetheless, new menus and recipes transformed from the original, traditional foods and recipes can be protectable as trade secrets. In this regard, certificate of the original documents of trade secret can be taken into account.

Article 9 bis (1) of the Unfair Competition Prevention Act prescribes that "In order to have an electronic document certified as to whether it is an original document containing trade secrets, a person who possesses trade secrets may file for registration of the unique identification value extracted from the relevant electronic document (hereinafter referred to as "electronic fingerprint") with an agency that certifies the original documents of trade secrets." Also, Article 9 bis (2) of the Unfair Competition Act states that "Where the electronic fingerprint registered under paragraph (1) and the electronic fingerprint extracted from the electronic document kept by a person who possesses trade secrets are the same, an agency that certifies the original documents of trade secrets..... may issue a certificate verifying that the relevant electronic document is the original registered with the electronic fingerprint (hereinafter referred to as "certificate of the original document")."¹⁵ In this regard, the person to whom a certificate of the original document was issued is presumed to hold information on the contents of the electronic document as is at the time of registration of the electronic fingerprint.¹⁶ Legal mechanism on the certification of the original document of trade secret is not to prove the date of development of trade secret or the person who developed the trade secret for the first time, but to show that the person to whom hold information on the contents of the electronic document as is at the time of registration of the electronic fingerprint. This mechanism is applicable to legal entities as well as individuals. Hence, a holder of recipe may apply for registration of his/her electronic fingerprint to protect his/her

¹⁵ Article 9 bis (1) and (2) of the Unfair Competition Prevention Act was introduced in 2013 (Act No. 11963, revised on July 30th, 2013 and effective since January 31st, 2014).

¹⁶ Article 9 bis (3) of the Unfair Competition Prevention Act was introduced in 2015 to ease burden of proof imposed on a holder of trade secret (Act No. 13081, revised on January 28th, 2015 and effective since the same date).

recipe in an active way.

c. GIs of Foods and Foodways

A. Geographical Indications and Traditional Knowledge

Food has drawn special attention from each country in international trade law.¹⁷ Food has frequently had some bearings on geographical indications (hereinafter "GI"). GI rights do not aim at encouraging innovation and individual creativity through the grant of a monopoly for a certain period. Instead, they represent commonly used geographical names, set up permanent communal rights, and purport to protect "old knowledge."¹⁸

In this context, Article 10.40 (1) of the Korea-EU FTA¹⁹²⁰ provides as follows:

ARTICLE 10.40: GENETIC RESOURCES, TRADITIONAL KNOWLEDGE AND FOLKLORE

1. Subject to their legislation, the Parties shall respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the involvement and approval of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilisation of such knowledge, innovations and practices.

2. The Parties agree to regularly exchange views and information on relevant multilateral discussions:

(a) in WIPO, on the issues dealt with in the framework of the Intergovernmental Committee on Genetic Resources, Traditional Knowledge and Folklore;

(b) in the WTO, on the issues related to the relationship between the TRIPS Agreement and the Convention on Biological Diversity (hereinafter referred to as the "CBD"), and the protection of traditional knowledge and folklore; and

(c) in the CBD, on the issues related to an international regime on access to genetic resources and benefit sharing.

3. Following the conclusion of the relevant multilateral discussions referred to in paragraph 2, the Parties agree, at the request of either Party, to review this Article in the Trade Committee in the light of the results and conclusion of such multilateral discussions. The Trade Committee may adopt any decision necessary to give effect to the results of the review.

¹⁷ Tomer Broude, *Taking "Trade and Culture" Seriously: Geographical Indications and Cultural Protection in WTO Law*, 26 U. Pa. J. Int'l Econ. L. 623, 629 (2005).

¹⁸ Graham Dutfield, *Protecting Traditional Knowledge and Folklore: A Review of Progress in Diplomacy and Policy Formulation 23* (UNCTAD-ICTSD Project on IPRs and Sustainable Dev., Issue Paper No. 1, 2003).

¹⁹ This bilateral FTA was initiated on October 15, 2009, officially signed by both parties on October 10, 2010. It has temporarily taken effect since July 1st, 2011 and wholly since December 13, 2015.

²⁰ Its official name is the "Free Trade Agreement Between the Republic of Korea, of the One Part, and the European Union and Its Member States, of the Other Part."

Furthermore, Article 37(1) of the "Framework Act on Agricultural Industry, Agricultural Community, and Food Industry"²¹ prescribes, under the title of "protection of intellectual property rights, etc.," that "the State shall set up and enforce the policies necessary to protect intellectual property rights related to agricultural industry, agricultural community and food industry, inclusive of agricultural genetic resources, farming techniques, traditional farming, method of producing traditional food, trademarks, geographical indications, new breeding and plant varieties, biotechnology."

In addition, Article 2, subparagraph 6 of the Act on Conservation and Use of Biological Diversity²² defines "traditional knowledge" as "knowledge, technology and practices of individuals and local community who has maintained traditional lifestyle appropriate for conservation of biological diversity and sustainable use of biological resources." Article 20 of the Act prescribes that the Korean government is obliged to carry out the following national policies to promote conservation and use of traditional knowledge: (i) finding, research and protection of traditional knowledge of individuals and local community; (ii) gathering of traditional knowledge-related information and establishment of system for managing it; and (iii) establishment of foundation for using traditional knowledge.

In this context, traditional knowledge and culture related to food and foodways can be indirectly protected under GI system.

B. Legal Sources and Current Development of GIs in Korea

GIs in Korea are primarily governed by: (i) the Trademark Act(Act No. 13848, amended on January 27, 2016 and effective since April 28th, 2016)²³; (ii) the Act on Quality Control of Agricultural and Fishery Products (Act No. 13268, amended on March 27th, 2015 based on revision of another law, and effective since March 28th, 2016); and (iii) and the Unfair Competition Prevention and Trade Secret Protection Act(Act No. 13844, amended on January 27th, 2016, effective since the same date)(hereinafter "Unfair Competition Prevention Act").²⁴

²¹ Act No. 13383, revised followed by revision of another law on June 22nd, 2015 and effective since December 23, 2015.

²² Act No. 12459, revised on March 18th, 2014 and effective since March 18th, 2014.

²³ Trademark Act (Act No. 14033), revised on February 29th, 2016, will be effective since September 1st, 2016.

²⁴ Gyooho Lee, *Chapter 3 Geographical Indications in South Korea*, in Sang-Mo Lee/Kwang-Dong Park/Song-Min

Under Korea-EU FTA,²⁵ GIs are defined as "(a) geographical indications, designations of origin, quality wines produced in a specified region and table wines with geographical indication as referred to in Council Regulation (EC) No 510/2006 of 20 March 2006; Regulation (EC) No 110/2008 of the European Parliament and of the Council of 15 January 2008; Council Regulation (EEC) No 1601/1991 of 10 June 1991; Council Regulation (EC) No 1493/1999 of 17 May 1999; and Council Regulation (EC) No 1234/2007 of 22 October 2007, or provisions replacing these regulations; and (b) geographical indications as covered by the Agricultural Products Quality Control Act (Act No. 9759, Jun. 9, 2009) and the Liquor Tax Act (Act No. 8852, Feb. 29, 2008) of Korea."²⁶ According to Subsection C footnote 3 of the Korea-EU FTA, the protection of a geographical indication under the Subsection C is without prejudice to other provisions in this FTA Agreement. This FTA's primary focus on GIs regards agricultural products and foodstuffs pursuant to Annex 10-A, which lists GIs for agricultural products and foodstuffs, and wines, aromatised wines and spirits based on Annex 10-B, which enumerates GIs for wines, aromatised wines and spirits. The GIs listed under the Korea-EU FTA will be protected within the borders of the other parties. However, the issue as to whether the GIs which becomes generic, such as Champagne for brandy, can be protected under the Korea-EU FTA need to be explored. The GIs with generic nature can not be protected under the Korean Trademark Law. However, they may be protected pursuant to the Korean Agricultural and Fishery Products Control Act and the Unfair Competition Prevention Act. Having examined a summary of the specifications of the agricultural products and foodstuffs corresponding to the geographical indications of Korea listed in Annex 10-A of the FTA, which have been registered by Korea under the Korean Act on Quality Control of Agricultural Products, the European Union undertakes to protect the geographical indications of Korea listed in Annex

Hong/Sun-pil Eum/Seung-Hwan Choi/Gyooho Lee, Current Issues in Korean Law, International Legal Collaboration Research 15-18-⑤ (Korea Legislation Research Institute, 2015).

²⁵ http://www.fta.go.kr/webmodule/_PSD_FTA/eu/doc/Full_Text.pdf (last visit on April 1st, 2016).

²⁶ Subsection C, fn 2 of the Korea-EU FTA.

10-A of the FTA according to the level of protection laid down in the Korea-EU FTA.²⁷ The Korea-EU FTA does not cover GIs for fishery products because both EU Regulations and the Korean referred to in the Korea-EU FTA do not. The Korea-EU FTA is the most important bilateral agreement Korea entered into in terms of protection of GIs.

In this regard, it should be noted that the total number of the registered collective marks for GI protection pursuant to the Korean Trademark Act as of August 21, 2015 amounts to 291 while the number of the registered GIs on basis of Agricultural and Fishery Products' Quality Control Act as of the same date is 169.²⁸

C. GIs Protection under the Korean Trademark Act

(a) Overview

The purpose of the Korean Trademark Act is to "to contribute to the development of industry and to protect the interests of consumers by maintaining the business reputation of those persons using trademarks through the protection of trademarks."²⁹ According to Article 2(1) 3-2 of the Korean Trademark Act, the term "geographical indication" refers to "an indication which identifies goods as being produced, manufactured, or processed in a region or locality where a given quality, reputation or any other characteristic of the goods is essentially attributable to their geographical origin."³⁰ It differs from GIs protection under the Act on Quality Control of Agricultural and Fishery products, which will be explained below. The word, "homonymous geographical indication," means "a geographical indication which has the same sound as another person's geographical indication for the same goods, but is different in region or locality."³¹ Pursuant to Article 2(1) 3-4 of the Korean Trademark Act, the term, "geographical collective mark,"³² means "a collective mark which is intended to be used directly by a corporation composed solely of the

²⁷ Article 10.18 (3) of the Korea-EU FTA.

²⁸ <http://www.agrinet.co.kr/news/articleView.html?idxno=139343> (last visit on April 1st, 2016).

²⁹ Article 1 of the Korean Trademark Act.

³⁰ Article 2(1) 3-2 of the Korean Trademark Act.

³¹ Article 2(1) 3-3 of the Korean Trademark Act.

³² According to Article 2(1) 3 of the Korean Trademark Act, the term "collective mark" means "a mark which is

persons who produce, manufacture, or process goods eligible for geographical indication as a business or which is intended to be used with respect to the goods of members of the corporation who are controlled by it." The term, "geographical certification mark," means "a certification mark with geographical indication used by a person who carries on the business of certifying the quality, origin, mode of production, or other characters of goods in order to certify whether the goods of a person who carries on the business of producing, manufacturing or processing goods satisfy specified geographical characters."³³ Any corporation jointly founded by the persons who produce, manufacture, process, or sell goods as a business or by the persons who carry on service business (in cases of a geographical collective mark, it is limited to a corporation comprised solely of the persons who produce, manufacture, or process goods eligible for the geographical indication as a business) may be entitled to have its collective mark registered.³⁴ Any person who can, as a business, certify and manage the quality, origin, mode of production or other characteristics of goods or service business may be entitled to have his/her certification mark registered in order to allow a person who carries on the business of producing, manufacturing, processing or selling goods or a person who carries on a service business to use as a means of certifying that goods or service business related to their business satisfies specified quality, origin, mode of production or other characteristics: Provided, That where he/she intends to use a certification mark for goods or service business related to his/her own business, such certification mark shall not be registered.³⁵

Article 6 of Korean Trademark Act³⁶ provides for distinctiveness requirement. Article 6 of the Korean Trademark Act prescribes that

"Article 6 (Requirements for Trademark Registration)

(1) A trademark registration may be granted, except a trademark falling under any of the following subparagraphs:

1. A trademark consisting solely of a mark indicating, in a common way, the ordinary name of the goods³⁷;
2. A trademark used customarily on the goods³⁸;

intended to be used directly by a corporation jointly founded by the persons who produce, manufacture, process, or sell goods as a business or the persons who carry on service business or which is intended to be used with respect to the goods or services of members of the corporation who are controlled by it."

³³ Article 2(1) 4-2 of the Korean Trademark Act.

³⁴ Article 3-2 of the Korean Trademark Act.

³⁵ Article 3-3 (1) of the Korean Trademark Act.

³⁶ It was amended on June 11st, 2014.

³⁷ It constitutes a generic mark under Abercrombie spectrum (e.g., apple for apple) (*Abercrombie & Fitch Co. v. Hunting World, Inc.* 537 F.2d 4 (2d Cir. 1976)).

3. A trademark consisting solely of a mark indicating in a common way the origin, quality, raw materials, efficacy, use, quantity, shape (including shapes of packages), price, producing method, processing method, using method or time of the goods³⁹;

4. A trademark consisting solely of a conspicuous geographical name, the abbreviation thereof or a map;

5. A trademark consisting solely of a mark indicating in a common way a common surname or name;

6. A trademark consisting solely of a simple and ordinary mark;

7. A trademark, other than those as referred to in subparagraphs 1 through 6, which does not enable consumers to recognize whose goods it indicates in connection with a person's business.

(2) Even though it falls under any of paragraph (1) 3 through 6, a trademark which is recognized among consumers whose goods it indicates in connection with his/her business as a result of using the trademark before the application for trademark registration under Article 9, may be registered with only goods having used the trademark as designated goods."

Article 6 (1) 3 and 4 of the Korean Trademark Law includes geographical name. Hence, a conspicuous geographical term is not distinctive pursuant to Article 6 (1) 4 of the Korean Trademark Law. If it acquires distinctiveness by its use pursuant to Article 6 (2) of the Korean Trademark Law, it can be registered. Nonetheless, if Article 7 (1) is applied to it, it may not be registered. Also, the place of origin is not distinctive because it is a descriptive mark based on Article 6 (1) 3 of the Korean Trademark Law. If it acquires a secondary meaning by its use, it can be registered. However, if Article 7 (1) is applied to it, it may not be registered. In addition, even though conspicuous geographical terms or the places of origin are not distinctive, it can be registered as geographical indication collective marks or geographical indication certification marks. If Article 7 (1) is applied to them, they may not be registered.

In sum, Article 7 (1) of the Korean Trademark Law⁴⁰ provides for requirements of unregistrable trademarks in spite

³⁸ Whether it constitutes a generic mark under Abercrombie spectrum is questionable because it is used by the same type of businesses (e.g., Tex for fabric) (Abercrombie & Fitch Co. v. Hunting World, Inc. 537 F.2d 4 (2d Cir. 1976)).

³⁹ It constitutes a descriptive mark under Abercrombie spectrum (Abercrombie & Fitch Co. v. Hunting World, Inc. 537 F.2d 4 (2d Cir. 1976)).

⁴⁰ Article 7 (Unregistrable Trademark)

(1) Notwithstanding Article 6, a trademark falling under any of the following subparagraphs shall be unregistrable:
1. Trademarks which are identical or similar to the national flag, the national emblem, colors, medals, decorations or badges of the Republic of Korea or seals or signs used for indicating supervision or certification by the Republic of

Korea or public institutions;

1-2. Trademarks which are identical or similar to the national flags of allied nations of the Paris Convention for the Protection of Industrial Property (hereinafter referred to as the "Paris Convention"), member nations of the World Trade Organization, or contracting parties to the Trademark Law Treaty (hereafter referred to as "allied nations, etc." in this paragraph);

1-3. Trademarks which are identical or similar to the titles, abbreviated names or marks of the Red Cross, the International Olympic Committee, or renowned international organizations: Provided, That where the Red Cross, the International Olympic Committee, or renowned international organizations have applied for trademark registration of its title, abbreviated name or mark, the same shall not apply;

1-4. Trademarks which are identical or similar to armorial bearings, flags, medals, decorations or badges of allied nations, etc. designated by the Commissioner of the Korean Intellectual Property Office after being notified from the World Intellectual Property Organization under Article 6-3 of the Paris Convention or to titles, abbreviated names, armorial bearings, flags, medals, decorations or badges of inter-governmental international organizations in which allied nations, etc. join: Provided, That where an inter-governmental international organization in which an allied nation or allied nations, etc. join applies for trademark registration of its title, abbreviated name (limited to an inter-governmental international organization in which allied nations, etc. join) or mark, the same shall not apply;

1-5. Trademarks which are identical or similar to seals or signs used for indicating supervision or certification by allied nations, etc. designated by the Commissioner of the Korean Intellectual Property Office after being notified from the World Intellectual Property Organization under Article 6-3 of the Paris Convention or their public organizations and used for the goods identical or similar to those for which such seals or signs are used;

2. Trademarks which falsely indicate a connection with a State, race, ethnic group, public organization, religion or famous deceased person, or which criticize, insult or are liable to defame them;

3. Trademarks which are identical or similar to famous marks indicating nonprofit business of the State, a public organization or its agencies or public corporations, or indicating nonprofit public services: Provided, That this shall not apply where the State, public organization or its agencies or public corporations, or the body of nonprofit public services, applies for trademark registration of such marks;

4. Where the trademark itself or the trademark is used for any goods, the meaning and contents, etc. of such trademark conveyed to consumers, are feared to be contrary to the virtuous customs that are deemed the prevailing moral sense of the ordinary people or to contravene public order;

5. Trademarks comprising of a mark which is identical or similar to, a medal, certificate of merit or decoration awarded at an exhibition held by or with approval by the Government of the Republic of Korea or at an exhibition held by or with approval by the government of a foreign country: Provided, That this shall not apply where a person who has been awarded a medal, certificate of merit or decoration has used it as part of his/her trademark on the same goods for which such medal, certificate of merit or decoration was awarded at the exhibition;

6. Trademarks containing the name, title or trade name, portrait, signature or seal, famous pseudonym, professional name or pen name of well-known other persons, or an abbreviation thereof: Provided, That this shall not apply where the consent of the person concerned has been obtained;

7. Trademarks which are identical with or similar to another person's registered trademark (excluding any registered geographical collective mark), the registration of which was made by an earlier application, and which are to be used on goods identical with or similar to the designated goods;

7-2. Trademarks which are identical with or similar to another person's registered geographical collective mark, the registration of which was made by an earlier application, and which are to be used on goods identical or recognized as identical with the designated goods;

8. Trademarks which are identical with or similar to another person's registered trademark (excluding any registered geographical collective mark), where one year has not elapsed since the date of extinguishment of the trademark right (in cases of a trial decision invalidating the trademark registration, the date when the trial decision became final and conclusive) and which are to be used on goods identical with or similar to the designated goods;

8-2. Trademarks which are identical with or similar to another person's registered geographical collective mark, where one year has not elapsed since the date of extinguishment of the geographical collective mark right (in cases of a trial decision invalidating the collective mark registration, the date when the trial decision became final and conclusive) and which are to be used on goods identical or recognized as identical with the designated goods;

9. Trademarks which are identical with or similar to another person's trademark (excluding any geographical indication) which is well known among consumers as indicating the goods of that other person and which are to be

of their distinctiveness.

In sum, the protection of GIs under the Korean Trademark Act are not limited to agricultural and fishery products. Also, the duration of protection of trademarks, including GIs, is 10 years from the date of registration.⁴¹ But, whether PGIs under the Act on Quality Control of Agricultural and Fishery Products have duration of protection is unclear because this Act remains silent.

(b) Cases

used on goods identical with or similar to such goods;

9-2. Trademarks which are identical with or similar to another person's geographical indication which is well known among consumers as indicating the goods of a specific region or locality and which are to be used on goods identical or recognized as identical with the goods using such geographical indication;

10. Trademarks which are liable to cause confusion with goods or services of another person because the trademark is recognized among consumers as designating the goods or services of the person;

11. Trademarks which are liable to mislead or deceive consumers as to the quality of the goods;

12. Trademarks which are identical or similar to any trademark (excluding any geographical indication) which is recognized as indicating the goods of a particular person by customers in the inside or outside of the Republic of Korea, and which are used for unjust purposes, such as obtaining unjust profits or inflicting harms on the particular person;

12-2. Trademarks which are identical or similar to a geographical indication which is recognized as indicating the goods of a specific region or locality by customers in the inside or outside of the Republic of Korea, and which are used for unjust purposes, such as obtaining unjust profits or inflicting harms on the person entitled to use such geographical indication;

13. Trademarks consisting solely of three-dimensional shapes, colors, the combination of colors, sound or odor essential (in cases of service business, referring to the cases in which it is essential to the use and purpose of the service business) to secure the functions of goods requiring trademark registration or their packaging;

14. Trademarks consisting of geographical indications or including such indications with regard to the origin of wines or spirits in a member nation of the World Trade Organization, and which are to be used in connection with wines, spirits, or other similar goods: Provided, That where the persons entitled to use the geographical indications make an application for geographical collective mark registration of the goods concerned as designated goods under Article 9 (4), the same shall not apply;

15. Trademarks which are identical or similar to variety denominations registered under Article 111 of the Seed Industry Act and used for goods identical or similar to such variety denominations;

16. Trademarks which are identical or similar to geographical indications of other persons registered pursuant to Article 8 of the Agricultural Products Quality Control Act or Article 9 of the Quality Control of Fishery Products Act and used for goods identical or recognized as identical to the goods using such geographical indications;

17. Trademarks which are identical or similar to geographical indications of other persons protected pursuant to free trade agreements that have been concluded between the Republic of Korea and foreign countries in a bilateral or multilateral manner and come into effect, or trademarks which consist of such geographical indications or include such geographical indications, and used for goods identical or recognized as identical to the goods using such geographical indications.

18. One's trademark in cases where one applied for registration of identical or similar trademark for identical or similar goods while knowing that another is using and is prepared to use his or her trademark through contractual relationship, such as partnership or employment relationship, or other ones.

⁴¹ Article 42 (1) of the Korean Trademark Act; Gyooho Lee, Trademark Law-Explanations and Cases- 669 (1st ed. 2015).

In Anhung Steamed Bread case,⁴² the Korean Patent Court, the court of second instance, ruled that *Anhung steamed bread*(안흥찐빵 in Korean) for steamed bread constituted a GI collective mark and was valid.



Source: <http://mwultong.blogspot.com/2007/09/anhung-bread.html> (last visit on May 2nd, 2016)

The following cases are not related to GIs but geographical term marks. They are illustrated to compare geographical term marks and GIs.

In Innsbruck case, the Korean Supreme Court held that the registered trademark, "INNSBRUCK + 인스브룩," constituted Article 6 (1) 4 of the Korean Trademark Law, which meant that it was a conspicuous geographic term because, as Innsbruck is the capital city of the federal state of Tyrol (Tirol) in western Austria, it has been famous for tourism and hosted the 1964 and 1976 Winter Olympics and because its history and landscape has been well-known through media and press.⁴³ In Java case,⁴⁴ the Korean Supreme Court held that:

(i) A conspicuous geographical name under Article 6 (1) 4 of the Korean Trademark Act does not necessarily mean a geographical name which indicates place of origin of an indigenous product of the locality linked to the geographical name of a specific goods. It merely a geographical, local name. Hence, as long as it is conspicuous, it falls under Article 6 (1) 4 of the Korean Trademark Act. It does not need to be recognized that it is specially linked to the designated goods; and

(ii) The applied term, "JAVA," was a conspicuous geographic name under Article 6 (1) 4 of the Korean Trademark

⁴² Judgment rendered by the Korean Patent Court on November 23rd, 2011 (Case No. 2011 Heo 6628).

⁴³ Judgment rendered by the Korean Supreme Court on July 27, 2001, Case No. 99 Hu 2723 (Action seeking invalidation of registration).

⁴⁴ In this case, the plaintiff was Sun Microsystems, Inc. while defendant was Commissioner of the Korea Industrial Property Office (currently Korea Intellectual Property Office).

Act."⁴⁵

In British-American case,⁴⁶ the Korean Supreme Court held that " The applied trademark, "British-American," for matches and lighters, was a conspicuous geographical name under Article 6 (1) 4 of the Korean Trademark Act."

In Pizza To go case,⁴⁷ the Korean Supreme Court held that, in terms of the trademark, "Pizza To go," for Pizza, the phrase, "To go," was not a conspicuous geographical name and reversed and remanded the appeal. Now, the following case deal with a trademark consisting of a geographical term and a descriptive mark.

[Figure 3] Plaintiff's trademark in Georgia Coffee case



In "Georgia coffee" case, plaintiff brought a lawsuit to revoke KIPO's denial for the plaintiff's application for registration of the mark in dispute.⁴⁸ The designated goods are coffee, tea, cocoa, sugar, rice, tapioc, sago, artificial coffee, flour and preparations made from cereals, bread, pastry and confectionery, ices, honey, yeast, baking powder, mustard, vinegar, sauces-condiments, spices, ice, treacle for food, treacle syrup, cooking salt, salt for food, salt for preserving foodstuff. The plaintiff's trademark are composed of the word "Georgia", figure of coffee beans, and figure of a coffee cup. In this case, the Korean Supreme Court held that "the word, "Georgia," is a conspicuous geographic name (a country name in Asia or a state name in America), and the figure of coffee beans is descriptive, and the figure of a coffee cup is descriptive because it describes that the ordinary consumers can associate it with drinking coffee." The Korean Supreme Court went on to hold that "Unless the combination of those marks create a new concept or a new distinctiveness, Article 6 (1) 4 of the Korean Trademark Act applies."

⁴⁵ Judgment rendered by the Korean Supreme Court on June 13, 2000, Case No. 98 Hu 1273 (Action to revoke the KIPO's denial of registration of the applied trademark).

⁴⁶ Judgment rendered by the Korean Supreme Court on October 14, 1997, Case No. 96 Hu 2456. In this case, petitioner was British-American Tobacco Company Limited whereas respondent was the Commissioner of the Korean Industrial Property Office.

⁴⁷ Judgment rendered by the Korean Supreme Court on August 22, 1997, Case No. 96 Hu 1682 (Chun-Woong Kim vs. Commissioner of KIPO).

⁴⁸ In this case, plaintiff (petitioner) was the Coca-Cola Company while defendant (respondent) was the Commissioner of the Korea Intellectual Property Office.

[Figure 4] Ildong Rice Wine



http://english.chosun.com/site/data/html_dir/2009/11/02/2009110200792.html (last visited 1st August, 2015)

In Ildong case, the Korean Supreme Court held that " Trademark "Ildong" is a conspicuous geographical name under Article 6 (1) 4 of the Korean Trademark Act."⁴⁹

D. GIs Protection under the Korean Unfair Competition Prevention Act

(a) Overview

Under Article 2(1)(d) and (e) of the Korean Unfair Competition Act, the following acts constitutes an unfair competition act: (i) an act of causing confusion about the place of origin by making false marks of the place of origin on goods, or on trade documents or in communications by means of advertisements of the goods or in a manner that makes the public aware of the marks; or by selling, distributing, importing or exporting goods bearing such marks; and (ii) An act of making a mark that would mislead the public into believing that goods are produced, manufactured, or processed at places, other than the actual places of production, manufacture, or processing, on goods, or on trade documents or in communications by means of advertisements of the goods or in a manner that makes the public aware of the mark; or selling, distributing, importing or exporting goods bearing such mark.

In addition, as to a geographic mark protected under a free trade agreement which is concluded bilaterally or multilaterally and takes effect between the Republic of Korea and a foreign country, or foreign countries, certain acts

⁴⁹ Judgment rendered by the Korean Supreme Court on July 11, 2003, Case No. 2002 Hu 2464.

are prohibited in line with those international instruments.⁵⁰

(b) Case

Well-known marks inclusive of geographic location, irrespective of whether it is registered, can be protected under Unfair Competition Prevention Act.⁵¹ Even though the following case is not related to GIs, it is important to

⁵⁰ Article 3 bis (Prohibition of Use of Geographic Mark Protected Under Free Trade Agreement, etc.) of the Korean Unfair Competition Act prescribes that:

"1. As to a geographic mark protected under a free trade agreement which is concluded bilaterally or multilaterally and takes effect between the Republic of Korea and a foreign country, or foreign countries, (hereafter referred to as "geographic mark" in this Article), in addition to the act of unfair competition under subparagraphs 1 (d) and (e) of Article 2, any person who does not have a legitimate source of right shall not conduct any of the following acts with respect to the goods whose place of origin is not the one indicated in the geographic mark concerned (limited to goods that are identical to or recognized to be identical to the goods with the relevant geographic mark):

(a) Using a geographic mark separately, in addition to the authentic place of origin;

(b) Using a geographic mark which is translated or transliterated;

(c) Using a geographic mark with the expression of "kind", "type", "mode", "counterfeit" or other expressions.

(d) Any person who does not have a legitimate source of right shall not conduct any of the following acts:

(5) An act of transferring or delivering goods with a geographic mark in a manner falling under any of the subparagraphs of paragraph (1), or an act of exhibiting, importing or exporting such goods for any aforementioned purpose;

(6) An act of delivering goods with a geographic mark in a manner falling under subparagraph 1 (d) or (e) of Article 2, or an act of exhibiting for any aforementioned purpose.

Notwithstanding the provisions of paragraph (1), a person who uses a trademark in a manner falling under any of the subparagraphs of paragraph (1) and has satisfied all the following requirements may continue to use the relevant trademark on the goods that have been used by the person:

That the relevant trademark shall be used at home prior to the date when the protection of a geographic mark commences;

2. The outcome of the use of the trademark pursuant to subparagraph 1 shall reveal that domestic consumers recognize the relevant trademark as the one indicated on any particular person's goods on the date when the protection of a geographic mark commences."

⁵¹ Article 2 of Unfair Competition Prevention and Trade Secret Protection Act ('Unfair Competition Prevention Act') (Act No. 13844, revised on January 27th, 2016 and effective since the same date) prescribes that

"Article 2 (Definitions)

The terms used in this Act shall be defined as follows:

1. The term "acts of unfair competition" means any of the following acts:

(a) An act of causing confusion with another person's goods by using marks identical or similar to, another person's name, trade name, trademark, or container or package of goods, or any other mark indicating another person's goods, which is widely known in the Republic of Korea; or by selling, distributing, importing or exporting goods bearing such marks;

(b) An act of causing confusion with another person's commercial facilities or activities by using marks identical or similar to, another person's name, trade name, or emblem, or any other mark indicating another person's business, which is widely known in the Republic of Korea;

(c) In addition to the act of causing confusion provided in item (a) or (b); an act of doing damage to distinctiveness or reputation attached to another person's mark by using the mark identical or similar to, another person's name, trade name, trademark, or container or package of goods, or any other mark indicating another person's goods or business, which is widely known in the Republic of Korea; or by selling, distributing, importing or exporting goods

bearing such marks; without good cause prescribed by Presidential Decree, such as the purpose of noncommercial use;

(d) An act of causing confusion about the place of origin by making false marks of the place of origin on goods, or on trade documents or in communications by means of advertisements of the goods or in a manner that makes the public aware of the marks; or by selling, distributing, importing or exporting goods bearing such marks;

(e) An act of making a mark that would mislead the public into believing that goods are produced, manufactured, or processed at places, other than the actual places of production, manufacture, or processing, on goods, or on trade documents or in communications by means of advertisements of the goods or in a manner that makes the public aware of the mark; or selling, distributing, importing or exporting goods bearing such mark;

(f) An act of falsely assuming another person's goods or an act of advertizing any goods or making a mark in any manner of leading the public to misunderstand their quality, content, manufacturing process, usage, or quantity, in latter goods or advertisement thereof, or selling, distributing, importing or exporting goods using such method or mark;

(g) An act of using a trademark, without good cause, on goods identical or similar to the designated goods of the trademark, or an act of selling, distributing, exporting; or importing goods with such trademark; by an agent or a representative of the owner of the trademark that is identical or similar to a trademark registered in any of the following countries or by a person who was an agent or a representative within one year of the date of such act:

(h) An act of registering, holding, transferring, or using a domain name identical or similar to, another person's name, trade name, or trademark, or any other mark, which is widely known in the Republic of Korea, by a person who does not have a legitimate source of right for any of the following purposes:

(i) An act of transferring or lending goods whose shape has been copied (referring to the form, image, color, gloss, or any combination of these, including the shape of any test product and the shape in goods brochure; hereinafter the same shall apply) from the goods manufactured by any other person; exhibiting such goods for transfer or lending; or importing or exporting such goods: Provided, That either of the following acts shall be excluded herefrom:

(i) An act of transferring or lending goods whose shape has been manufactured by counterfeiting the shape of the other goods for which three years have elapsed from the date on which the shape of the other goods, including the production of the prototype, was completed; exhibiting such goods for transfer or lending; or importing or exporting such goods;

(ii) An act of transferring or lending goods whose shape has been manufactured by counterfeiting the common shape of goods that are identical to the goods manufactured by any other person (where the goods of the same kind are nonexistent, referring to other goods whose function or utility is identical or similar to the relevant goods); exhibiting such goods for transfer or lending; or importing or exporting such goods;

(j) In addition, an act which infringes another's economic interests by using an outcome derived from another's substantial investment or efforts, without authorization for one's own business in a way contradictory to fair trade practices or competition order. <added on July 30, 2013>

2. The term "trade secret" means information, including a production method, sale method, useful technical or business information for business activity, that is not known publicly, is the subject of considerable effort to maintain its secrecy, and has independent economic value;

3. The term "infringement of trade secrets" means any of the following acts:

(a) An act of acquiring trade secrets by theft, deception, coercion or other improper means (hereinafter referred to as "act of improper acquisition"), or subsequently using or disclosing the trade secrets improperly acquired (including informing any specific person of the trade secret while under a duty to maintain secrecy; hereinafter the same shall apply);

(b) An act of acquiring trade secrets or using or disclosing the trade secrets improperly acquired, with knowledge of the fact that an act of improper acquisition of the trade secrets has occurred or without such knowledge due to gross negligence;

(c) An act of using or disclosing trade secrets after acquiring them, with knowledge of the fact that an act of improper acquisition of the trade secrets has occurred or without such knowledge due to gross negligence;

(d) An act of using or disclosing trade secrets to obtain improper benefits or to damage the owner of the trade secrets while under a contractual or other duty to maintain secrecy of the trade secrets;

(e) An act of acquiring trade secrets, or using or disclosing them with the knowledge of the fact that they have been disclosed in the manner provided in item (d) or that such disclosure has been involved, or without such knowledge due to gross negligence;

understand the Unfair Competition Prevention Act in terms of geographical location. In University of Cambridge case, the Korean Supreme Court held that " Even though a trademark or a service mark which merely consists of a conspicuous geographical name(s) is not protectable under the Trademark Act, it constitutes a business mark protected under Unfair Competition Prevention Act in cases where it is acknowledged widely. Similarity of the marks under Article 2 (1) (a) of the Unfair Competition Act depends upon perception of which, in specific trade practices, ordinary consumers or trading partners feels on the marks after observing entirely, objectively and detachedly in terms of appearance, appellation, and concept of both marks."⁵² In this criminal case, victim's mark is "캠브리지 멤버스," and "CAMBRIDGE MEMBERS " for men's suits whereas the accused's mark is "캠브리지 유니버시티," and "UNIVERSITY OF CAMBRIDGE " for shirts.

E. Protection of PGIs under the Korean Act on Quality Control of Agricultural and Fishery Products

Article 2 (1) 8 of Agricultural and Fishery Products Quality Control Act prescribes that the term, "geographical indication" refers to "an indication displaying that agricultural or fishery products or processed agricultural or fishery products....., the reputation, quality and other attributes of which are essentially originated from the geographical characteristics of a specific region, are produced and processed in the specific region." The requirements for registration of geographical indication under the Agricultural and Fishery Products Quality Control Act appears to be much stricter than that for registration of trademark under the Trademark Act. Also, Article 2 (1) 9 of the Act prescribes that the term 'homonymic geographical indication' connotes that "a geographical indication, the pronunciation of which is identical to that of another person's geographical indication for the same item but refers to a different region." The Agricultural and Fishery Products Quality Control Act affords protection on geographical indication. In this Act a right to geographical indication stands for "intellectual property right to

(f) An act of using or disclosing trade secrets after acquiring them, with the knowledge of the fact that they have been disclosed in a manner provided in item (d) or that such disclosure has been involved, or without such knowledge due to gross negligence;

4. The term "domain name" means a number, a letter, or a sign, or any combination of these, which constitutes an Internet address composed of numbers."

⁵² Judgment rendered by the Korean Supreme Court on January 26, 2006, Case No. 2003 Do 3906 (Violation of Unfair Competition Prevention Act).

exclusively use geographical indications registered pursuant to the Act.” In this regard, it should be compared to a right granted on geographical indication under the Trademark Act because the right to geographical indication pursuant to the Agricultural and Fishery Products Quality Control Act is clearly prescribed as a kind of intellectual property right.⁵³

Whether PGIs under the Act on Quality Control of Agricultural and Fishery Products have duration of protection is unclear because this Act remains silent. Also, the conditions for registration of PGIs under the Act on Quality Control of Agricultural and Fishery Products are not explicitly prescribed even though they can be inferred from the combined interpretation of the Act and Executive Decree for the Act on Quality Control of Agricultural and Fishery Products. In addition, the GI examination board under the Act is well qualified for the examination of GI application.

2. Active Ways of Protection of Foods and Foodways under Non-IP Regime

a. Cultural Heritage Protection Act

Cultural Heritage Protection Act⁵⁴ can contribute to conserving and using traditional foods and foodways on basis of the Korean administrative laws.

According to Article 2 (1) 2 (c) and (e) of Cultural Property Protection Act,⁵⁵ intangible cultural properties cover traditional knowledge including oriental medicine, farming and fishing, and traditional customs inclusive of clothing, food, and housing.

According to Article 2(1)2 of Cultural Heritage Protection Act, a term “intangible cultural heritage” is defined as “intangible cultural works of outstanding historic, artistic, or academic value, such as drama, music, dance, game, ritual, craft skill, etc.” The Administrator of the Cultural Heritage Administration may designate more valuable intangible cultural heritage as important intangible cultural heritage, following deliberation by the Cultural Heritage Committee.

Where the Administrator of the Cultural Heritage Administration designates any intangible cultural heritage as

⁵³ Gyooho Lee, *A Study on the Protection of Collective Marks and Certification Marks Indicating Geography*, Vol. 2-3 Kyungwon Law Review 119, 143 (Nov. 2009).

⁵⁴ Act No. 961, enacted on Jan. 10, 1962 and effective since Jan. 10, 1962.

⁵⁵ Act No. 13964, revised on February 3rd, 2016 and effective since August 4th, 2016.

important intangible cultural heritage, he/she shall recognize a holder (including a holding organization; hereinafter the same shall apply) of the important intangible culture heritage.

On 9 February, 2005, Korea became the 11th signatory to the Convention for the Safeguarding of the Intangible Cultural Heritage adopted on 17 December, 2003. Based on this Convention, 18 Korean intangible cultural heritages of humanity were inscribed on the UNESCO list as of May 25th, 2016. Kimjang, Making and Sharing Kimchi in the Republic of Korea, is one of them, which was inscribed on the UNESCO list in 2013.

b. Act on Conservation and Use of Biological Diversity

Like Cultural Heritage Protection Act, the Act on Conservation and Use of Biological Diversity can also contribute to conserving and using traditional foods and foodways on basis of the Korean administrative laws.⁵⁶

Article 2, subparagraph 6 of the Act on Conservation and Use of Biological Diversity defines "traditional knowledge" as "knowledge, technology and practices of individuals and local community who have maintained traditional lifestyle appropriate for conservation of biological diversity and sustainable use of biological resources."

Article 20 of the Act prescribes that the Korean government is obliged to carry out the following national policies to promote conservation and use of traditional knowledge: (i) finding, research and protection of traditional knowledge of individuals and local community; (ii) gathering of traditional knowledge-related information and establishment of system for managing it; and (iii) establishment of foundation for using traditional knowledge.

c. Voluntary Escrow of Recipes or Information on Food under the Act on the Promotion of Collaborative Cooperation between Large and Small-Medium Enterprises

The escrow system⁵⁷ under the Act on the Promotion of Collaborative Cooperation between Large and Small-Medium Enterprises (hereinafter "Cooperation Promotion Act"),⁵⁸ was introduced into the Cooperation Promotion

⁵⁶ Act No. 12459, revised on March 18th, 2014 and effective since March 18th, 2014.

⁵⁷ http://www.win-win.or.kr/web/work.do?type=01_03 (last visit on April 28th, 2016).

⁵⁸ Act No. 13839, revised on January 27th, 2016 and effective since April 28th, 2016.

Act in 2010⁵⁹ and the total number of escrow exceeded 10,000 as of March 2014.⁶⁰ The Large and Small Business Cooperation Foundation, which was established under the supervision of Small and Medium Enterprise Administration, has been in charge of the escrow of technical data.

According to Article 2, subparagraph 9 of the Cooperation Promotion Act,⁶¹ the term "technical data" means "the method of manufacturing or producing goods, etc. and other data useful for business activities and have independent economic value, which prescribed by the Enforcement Decree on the Cooperation Promotion Act (Presidential Decree).⁶² Article 1 bis of the Enforcement Decree on the Cooperation Promotion Act prescribes that the technical data consists of information on intellectual property rights such as patents, utility model rights, design rights, copyrights⁶³ or on useful technical or business information for business activity such as methods for manufacture, production and sale.⁶⁴ Even though useful technical or business information for business activity is not the subject of *considerable* effort to maintain its secrecy, it can be voluntarily escrowed under the Cooperation Promotion Act. Hence, the scope of information pursuant to Article 1 bis (2) of the Cooperation Promotion Act is broader than that of trade secrets, which requires that their holder(s) make *reasonable* effort to maintain its secrecy.

A bailor enterprise may register its technical data: (i) the title, type, and production date of technical data; (ii) the outline of technical data, (iii) the name and address of the bailor enterprise; (iv) other matters prescribed by Presidential Decree.⁶⁵

If any dispute occurs between the parties concerned or the parties interested with regard to technology of a bailor enterprise registered in its real name, such technology shall be presumed to have been developed in accordance with the details of the deposited goods.⁶⁶ In this context, recipes and information on foods which are believed to have independent economic values can be escrowed, and are legally presumed to be developed by its bailor at the date when they were produced in accordance with the details of the deposited recipes and information on foods as is. The Cooperation Promotion Act is applicable only to businesses, excluding individuals.

⁵⁹ Act No. 10399, revised on December 7th, 2010 and effective since the same date.

⁶⁰ <http://news.kbiz.or.kr/news/articleView.html?idxno=34916> (last visit on May 1st, 2016).

⁶¹ Act No. 13839, revised on January 27th, 2016 and effective since April 28th, 2016.

⁶² Presidential Decree No. 26717, revised on December 15th, 2016 and effective since January 25th, 2016.

⁶³ Article 1 bis, subparagraph 1 of the Enforcement Decree on Cooperation Promotion Act.

⁶⁴ Article bis, subparagraph 2 of the Enforcement Decree on Cooperation Promotion Act.

⁶⁵ Article 24 ter of the Cooperation Promotion Act.

⁶⁶ Article 24 ter of the Cooperation Promotion Act.

II. Passive Ways of Protection of Foods and Foodways under IP Regime

1. Patents of Foods and Foodways

a. Patentability of Foods and Foodways

The national Internet portals related to foods and foodways play an important role in protecting individuals, legal entities, and foreign governments from patenting the Korean traditional foods and recipes. In other words, the lack of novelty will prohibit them from patenting the original form of the Korean traditional foods and recipes.

b. Nestle's Kimchi-Related case

In 1983, Societe d'Assistance Technique pour Produits Nestle S. A. (hereinafter "Nestle") applied for a patent for a process for producing vegetable juice through fermentation, similar to a process used to make Kimchi, in 15 countries including South Korea.⁶⁷ Its patent application was denied in Korea because the application is similar to Kimchi. However, except for its patent application in Korea, its patent applications for the same process were approved in other 14 countries. For example, in USA, "Preparation of a flavored solid vegetable and vegetable juice utilizing hydrolysed protein"⁶⁸ was filed on October 4, 1983 and patented on December 25, 1984, before United States Patent and Trademark Office (hereinafter "USPTO").⁶⁹

The reason why Nestle obtained patents for the process in other 14 nations is that, in 1983, no official references were available to prevent Nestle from patenting the process making vegetable juice through fermentation.⁷⁰ Hence, it was imperative for the Korean government to establish the Internet homepage(s) which introduce information on

⁶⁷ Hyun-cheol Kim, *Web Site for Korean Recipes Launched*, Korea Times, July 28, 2009, available at <http://www.koreatimes.co.kr/www/common/printpreview.asp?categoryCode=123&newsIdx=49220> (last visit on April 22, 2016).

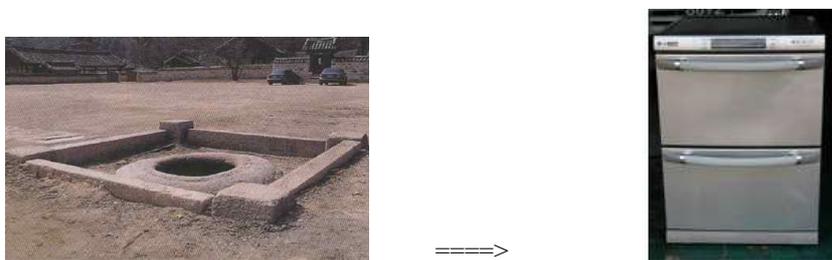
⁶⁸ Korean Intellectual Property Office, *Introduction of Korean Traditional Knowledge Portal (KTKP)*, March, 2011, available at http://www.wipo.int/edocs/mdocs/tk/en/wipo_tkdl_del_11/wipo_tkdl_del_11_ref_t9_4.pdf (last visit on April 22, 2016).

⁶⁹ United States Patent No. 4,490,396 (December 25, 1984).

⁷⁰ Hyun-cheol Kim, *supra* note 67.

the traditional Korean foods and foodways to the public. In this regard, Korea Traditional Food portal⁷¹ is very pivotal for the Korea Food Research Institute (hereinafter "KFRI") to meet international standards in its promotion of the Korean foods and foodways. In 2009, the website was introduced by the KFRI under a year-long collaboration with the Korea Agency of Digital Opportunity and Promotion and the Korea Institute of Science and Technology.⁷² Another significant web site is Korean Traditional Knowledge Portal.⁷³ This web site has been operated by the Korean Intellectual Property Office since December 2007. It includes information on traditional as well as local food. The web site for traditional food in the Korean Traditional Knowledge portal covers information on traditional foods, their recipes and foodstuff.

[Figure 5] Application of Traditional preservation method of Kimchi in winter



Traditional stone jar for preservation of Kimchi at Beop-ju temple, in winter

Refrigerator for preservation of Kimchi throughout the year⁷⁴

[Figure 6] Patent of Korean Traditional Knowledge in the USA

⁷¹ www.tradifood.net (last visit on March 21st, 2016).

⁷² Hyun-cheol Kim, *supra* note 67.

⁷³ <http://www.koreantk.com> (last visit on February 27th, 2016).

⁷⁴ <http://shopping.daum.net/search/%EA%B9%80%EC%B9%98%EB%83%89%EC%9E%A5%EA%B3%A0%20%EC%82%AC%EC%A7%84/&docid:M500562738&srchhow:Cexpo> (last visit on May 1st, 2016).

United States Patent [19]

Hsu et al.

[11] **Patent Number:** 4,490,396

[45] **Date of Patent:** * Dec. 25, 1984

[54] **PREPARATION OF A FLAVORED SOLID VEGETABLE AND VEGETABLE JUICE UTILIZING HYDROLYSED PROTEIN**

[75] **Inventors:** Jau Y. Hsu; Elaine R. Wedral, both of Brookfield, Conn.; William J. Klinker, Blue Island, Ill.

[73] **Assignee:** Societe d'Assistance Technique pour Produits Nestle S. A., Lausanne, Switzerland

[*] **Notice:** The portion of the term of this patent subsequent to Sep. 8, 1999 has been disclaimed.

[21] **Appl. No.:** 538,792

[22] **Filed:** Oct. 4, 1983

Related U.S. Application Data

[63] Continuation-in-part of Ser. No. 435,074, Oct. 18, 1982, Pat. No. 4,428,968.

[51] **Int. Cl.³** **A23L 1/218**

[52] **U.S. Cl.** **426/49; 426/8; 426/51; 426/650**

[58] **Field of Search** 426/49, 51, 52, 8, 481, 426/533, 615, 650

[56] **References Cited**

U.S. PATENT DOCUMENTS

3,840,674 10/1974 Mosher 426/533
4,242,361 12/1980 Christ et al. 426/49

OTHER PUBLICATIONS

Desrosier, N. W. Elements of Food Technology; 1977 Avi Publ. Co. pp. 246-250.

Lopez, A., A Complete Course in Canning, 1970, The Canning Trade, Inc., pp. 241-246.

Primary Examiner—Robert Yoncoskie

Assistant Examiner—Marianne S. Minnick

Attorney, Agent, or Firm—Vogt & O'Donnell

[57] **ABSTRACT**

A process for the production of flavored vegetables which comprises fermenting a vegetable in the presence of a powdered hydrolysed protein wherein the total amount of salt present in the process is from 1.0% to 4.5% by weight based on the weight of the vegetable.

3 Claims, No Drawings



Kimchi



sauerkraut

2. International Trademark Classification of Food (Nice Classification)

Since January 1, 2007, the English designation of Kimchi was listed on the Nice Agreement Concerning the International Classification of Goods and Services for the Purposes of the Registration of Marks (hereinafter "the Nice Classification"). Hence, the name "Kimchi" gained the international prestige of the side food and assured the global businesses and international legal community that the traditional Korean food made of pickled cabbages was

originated from the Korea, not other countries.⁷⁵ In this regard, the Japanese have referred to it as "Kimuchi." The Nice Classification can contribute to proving the origin of the traditional knowledge in some sense.

[Table 1] Nice Classification [International Trademark Classification]

Edition/Year	Class	Indication of Goods	Basic No.
9th/2007	29	fermented vegetable foods [kimchi] in English aliments à base de légumes fermentés [kimchi] in French	290162
10th/2016	29	kimchi [fermented vegetable dish] in English kimchi [plat à base de légumes fermentés] in French	290162

As shown in Kimchi case, the original and long-standing form of traditional staple foods can be listed on Nice Classification, preventing foreign governments, legal entities, and individuals from obtaining a trademark in foreign jurisdictions. In this context, The word, "Kimchi," will be a generic term. However, from the cultural perspective, it will signify that the internationally well-known Korean food originally came from Korea.

Conclusion

As mentioned above, traditional foods and foodways can be protected by IP and non-IP regimes in active ways and IP regimes in passive ways. In this regard, traditional foods and foodways can be preserved by developing national Internet portals which have posted information on them. The national Internet portals related to food and foodways play an important role in protecting individuals, legal entities, and foreign governments from patenting the Korean

⁷⁵ http://english.whatsonkorea.com/include/list_ann_comment.php?aid=1713 (last visit on May 1st, 2016).

traditional food and recipes. In other words, the lack of novelty will prohibit them from patenting the original form of the Korean traditional food and recipes. Also, as shown in Kimchi case, the original and long-standing form of traditional staple food can be listed on Nice Classification, preventing foreign governments, legal entities, and individuals from obtaining a trademark in foreign jurisdictions. It will signify that the internationally well-known Korean food originally came from Korea.

The improvement of traditional foods and foodways can be protected pursuant to patent law, unfair competition law, and the escrow system under the Cooperation Promotion Act. Especially, traditional knowledge on the Korean foods and foodways can be good subject-matters of GI protection. In other words, traditional knowledge and culture related to food and foodways can be indirectly protected under GI system.

From the perspective of comparativists, the protection of GIs for fishery products have not been fully developed. A potential applicant for registration of trademark in China is strongly advised to apply for registration of a trademark in Chinese as well as in English and in his/her own language because a trademark in Chinese sounds totally different from one in English or his/her own language. That is, Chinese is ideogram whereas English and Korean are phonograms. In this regard, it should be noted that Japanese consists of katakana and hirakana as phonogram, and Chinese characters as ideogram. For example, BMW registered 寶馬 [Baoma] for BMW, by using Chinese characters. Territoriality principle applies to trademark law. Even though a GI for a designated goods is conspicuous in Korea and can not be registered in Korea, it can be registered for the designated goods or other goods in Japan, China, and any other countries. To solve the territoriality principle applied to GIs, bilateral international agreements, such as the Korea-EU FTA, can be used.

However, those countries who implanted GIs protection into their legal system, such as Korea and China, have experienced some troubles, resulting in employing competing and, sometimes conflicting, legal schemes. In this regard, IP community need to delve into substantive aspects of GIs protection, including the scope and level of protection for GIs, conditions for registration of GIs, and duration of GIs protection. Also, effective enforcement and consistent procedure which deals with disputes pertaining to GIs protection need to be taken into account.

In addition, in terms of active ways of protection of traditional foods and foodways under Non-IP Regime, Cultural Heritage Protection Act and the Act on Conservation and Use of Biological Diversity can contribute to conserving and using traditional food and foodways on basis of the Korean administrative laws. In this regard, traditional foods

and foodways which do not fall within the definition of traditional knowledge under these laws, can be protected by classic IP laws and/or as intangible cultural properties.

Another thing to be taken into account is that the Korean IP regime does not provide us with a clear picture of how to protect traditional knowledge as intellectual property.

In sum, in terms of protection of traditional foods and foodways as intangible properties, IP laws, cultural property protection law, and/or biodiversity protection law will govern it, depending on who owns or holds the right on it or who can benefit from it. In this regard, intangible cultural property needs to be differentiated from intangible cultural heritage. Cultural property protection law refers to intangible cultural property on national level and intangible cultural heritage on international level, which means that the law has failed to identify implication of the bifurcated wordings.

[Appendices]

I. Korea-EU FTA

ANNEX 10-A GEOGRAPHICAL INDICATIONS FOR AGRICULTURAL PRODUCTS AND FOODSTUFFS

PART A. AGRICULTURAL PRODUCTS AND FOODSTUFFS ORIGINATING IN THE EUROPEAN UNION¹ 2(as referred to in Article 10.18.4)

FRANCE

Name to be protected Product Transcription into Korean alphabet

Comte Cheese 콩떼 / 콩테

Reblochon Cheese 르블로송 / 레블로송

Roquefort Cheese 로끄포르 / 로크포르

Camembert de Normandie Cheese 까망베르 드 노르망디 /

카망베르 드 노르망디

Brie de Meaux Cheese 브리 드 모

Emmental de Savoie Cheese 에멘탈 드 사부아 / 에멩팔 드 짜부아

GERMANY

Name to be protected Product Transcription into Korean alphabet

Bayerisches Bier Beer 바이어리췌스 비어

Munchener Bier Beer 뮌헨어 비어

ITALY

Name to be protected Product Transcription into Korean alphabet

Aceto balsamico 아체토 발사미코
 Tradizionale di Modena 트라디치오날레 디 모데나
 Sauce - seasoning (모데나의 전통 발사믹 식초)
 Cotechino Modena Pork meat sausage 코테키노 모데나 (모데나의 코테키노 <소시지의 일종>)
 Zampone Modena Pork meat 잠포네 모데나 (모데나의 돼지 앞발)
 Mortadella Bologna Large pork meat sausage 모르타델라 볼로냐 (볼로냐의 모르타델라 <소시지의 일종>)
 Prosciutto di Parma Ham 프로슈토 디 파르마 (생햄)
 Prosciutto di S. Daniele Ham 프로슈토 디 산 다니엘레 (생햄)
 Prosciutto Toscano Ham 프로슈토 토스카노 (생햄)
 Provolone Valpadana Cheese 프로볼로네 발파다나 (치즈의 일종)
 Taleggio Cheese 탈레조 (베르가모 산 치즈의 일종)
 Asiago Cheese 아시아고
 Fontina Cheese 폰티나 (발다오스타 지역의 치즈의 일종)
 Gorgonzola Cheese 고르곤졸라 (치즈의 일종)
 Grana Padano Cheese 그라나 파다노 (치즈의 일종)
 Mozzarella di Bufala Campana
 Cheese 모차렐라 디 부팔라 캄파나 (물소젖 치즈의 일종)
 Parmigiano Reggiano Cheese 파르미자노 레자노 (치즈의 일종)
 Pecorino Romano Cheese 페코리노 로마노 (로마의 페코리노 <양젖 치즈의 일종>)

PART B. AGRICULTURAL PRODUCTS AND FOODSTUFFS ORIGINATING IN KOREA (as referred to in Article 10.18.3)

Name to be protected Product Transcription into Latin alphabet
 보성녹차(Boseong Green Tea)
 Green Tea Boseong Nokcha
 하동녹차(Hadong Green Tea) Green Tea Hadong Nokcha
 [Omitted]
 고려홍삼(Korean Red Ginseng) Red Ginseng Goryeo Hongsam
 [Omitted]

**ANNEX 10-B
GEOGRAPHICAL INDICATIONS FOR WINES, AROMATISED WINES AND**

SPIRITS

PART A. WINES, AROMATISED WINES AND SPIRITS ORIGINATING IN THE EUROPEAN UNION¹ (as referred to in Article 10.19.1)

SECTION 1. WINES ORIGINATING IN THE EUROPEAN UNION

FRANCE

Name to be protected Transcription into Korean alphabet

Beaujolais 보졸레

Bordeaux 보르도

Bourgogne 부르고뉴 / 버건디

Chablis 샤블리 / 샤블리스

Champagne 샹파뉴 / 샴페인 / 샹빠뉴

[Omitted]

GERMANY

Name to be protected Transcription into Korean alphabet

Mittelrhein 미틸라인

Rheinhessen 라인헤센

Rheingau 라인가우

Mosel 모젤

ITALY

Name to be protected Transcription into Korean alphabet

Chianti 키안티

Marsala 마르살라

Asti 아스티

Barbaresco 바르바레스코

Bardolino 바르도리노

Barolo 바롤로

Brachetto d'Acqui 브라케토 다퀴

Brunello di Montalcino 브루넬로 디 몬탈치노

Vino nobile di Montepulciano 비노 노빌레 디 몬테 풀치아노

Bolgheri Sassicaia 볼게리 사씨카이아

Dolcetto d'Alba 돌체토 달바

Franciacorta 프란차코르타

Lambrusco di Sorbara 람브루스코 디 소르바라

Lambrusco Grasparossa di Castelvetro 람브루스코 그라스파로사 디 카스텔 베틀로

Montepulciano d'Abruzzo 몬테풀치아노 다브루초

Soave 소아베

Campania 캄파니아

Sicilia 시칠리아

Toscana 토스카나

Veneto 베네토

Conegliano Valdobbiadene 코넬리아노 발도비아테네

SECTION 2. SPIRITS ORIGINATING IN THE EUROPEAN UNION^{2 3}

FRANCE

Name to be protected Transcription into Korean alphabet

Cognac 꼬냑 / 코냑

Armagnac 아르마냑

Calvados 칼바도스 / 칼바도스

GERMANY

Name to be protected Transcription into Korean alphabet

Korn / Kornbrand7 코언 / 코언브랜드

UNITED KINGDOM

Name to be protected Transcription into Korean alphabet

Scotch Whisky 스카치 위스키

PART B . WINES, AROMATISED WINES AND SPIRITS ORIGINATING IN KOREA (as referred to in Article 10.19.2)

SPIRITS

Name to be protected Transcription into Latin alphabet

진도홍주(Jindo Hongju) Jindo Hongju

II. Nestle's Kimchi-related Patent in the USA

United States Patent

4,490,396

Hsu , et al.

* December 25, 1984

Please see images for (Certificate of Correction) *
Preparation of flavored (fermented) vegetable and vegetable juice utilizing hydrolysed protein

Abstract

A process for the production of flavored vegetables which comprises fermenting a vegetable in the presence of a powdered hydrolysed protein wherein the total amount of salt present in the process is from 1.0% to 4.5% by weight based on the weight of the vegetable.

Inventors: Hsu; Jau Y. (Brookfield, CT), Wedral; Elaine R. (Brookfield, CT), Klinker; William J. (Blue Island, IL)

Assignee: Societe d'Assistance Technique pour Produits Nestle S. A. (Lausanne, CH)

[*] **Notice:** The portion of the term of this patent subsequent to September 8, 1999 has been disclaimed.

Family ID: 27030416

Appl. No.: 06/538,792

Filed: October 4, 1983

Related U.S. Patent Documents

<u>Application Number</u>	<u>Filing Date</u>	<u>Patent Number</u>	<u>Issue Date</u>
435074	Oct 18, 1982	4428968	

Current U.S. Class: 426/49; 426/51; 426/650; 426/8
Current CPC Class: A23B 7/105 (20130101)
Current International Class: A23B 7/10 (20060101); A23L 001/218 ()
Field of Search: ;426/49,51,52,8,481,533,615,650

References Cited [\[Referenced By\]](#)

U.S. Patent Documents

3840674	October 1974	Mosher
4242361	December 1980	Christ et al.

Other References

Desrosier, N. W. Elements of Food Technology; 1977 Avi Publ. Co. pp. 246-250. .
Lopez, A., A Complete Course in Canning, 1970, The Canning Trade, Inc., pp. 241-246..

Primary Examiner: Yoncoskie; Robert
Assistant Examiner: Minnick; Marianne S.
Attorney, Agent or Firm: Vogt & O'Donnell

Parent Case Text

REFERENCE TO RELATED APPLICATIONS

This application is a continuation-in-part of U.S. application Ser. No. 435,074, filed Oct. 18, 1982 U.S. Pat. No. 4,428,968.

Claims

We claim:

1. A process for the production of a flavoured solid vegetable and vegetable juice which comprises fermenting a vegetable in the presence of salt in an amount of from 1.0% to 4.5% by weight based on the weight of the vegetable and a powdered hydrolysed protein in an amount of from 1% to 10% by weight based on the weight of the vegetable.
 2. The process of claim 1, wherein the total amount of salt present in the fermentation process is from 1.75% to 3.75% by weight based on the weight of the vegetable.
 3. The process of claim 1, wherein the vegetable juice obtained is separated from the fermented vegetable and further mixed with hydrolysed protein to produce a flavoured seasoning product.
-

Description

The present invention relates to the production of flavoured fermented vegetables, particularly to fermented vegetables having meat flavour characteristics.

Sauerkraut which has been flavoured by spices such as caraway seed has been known for a long time. However, up to the present time, sauerkraut having meat flavour characteristics has not been produced. Considering that sauerkraut is usually consumed with meat, it would be very desirable to develop a meaty flavoured sauerkraut.

In the fermentation of vegetables, salt is normally used to withdraw water and nutrients from the vegetable tissue. The nutrients furnish the substrate for the growth of lactic acid bacteria. Acids are produced during the fermentation process and the combination of the acids produced during fermentation inhibits the growth of undesirable bacteria and delays enzymatic softening of the vegetables. It is also known that during lactic acid fermentation of vegetables, lowering the pH or increasing the acidity at the beginning of the process inhibits the growth of some microorganisms and promotes the growth of acid tolerant bacteria such as lactic acid bacteria.

We have now surprisingly found that by substituting powdered hydrolysed plant protein, either completely or partially, for the salt which is normally used during the fermentation of vegetables, a meaty flavoured vegetable is produced, the growth of lactic acid bacteria is promoted and the production of lactic acid is increased without the necessity of lowering the pH or increasing the acidity at the beginning of the process.

Accordingly, the present invention provides a process for the production of flavoured vegetables which comprises fermenting a vegetable in the presence of a powdered hydrolysed protein wherein the total amount of salt present in the process is from 1.0% to 4.5% by weight based on the weight of the vegetable.

The fermented vegetable may be any vegetable preserved by lactic acid fermentation alone or in combination with any other fermentation treatment, for example, fermented vegetables prepared from cabbage, cucumber, green tomato, red pepper, mustard stem, mustard green, radish, turnip, squash or green beans.

The total amount of salt present in the fermentation process is conveniently from 1.5% to 4.0% by weight, preferably 1.75% to 3.75% by weight and especially from 2.0% to 3.6% by weight based on the weight of the vegetable.

Powdered hydrolysed protein usually contains from 30% to 50% by weight of salt based on the weight of the protein and, if desired, all the salt that is present in the process may be contained wholly within the protein. Alternatively some salt may be added separately in addition to that contained in the powdered hydrolysed protein so that the desired amount of salt is present in the fermentation process.

The amount of powdered hydrolysed protein present in the fermentation process may be from 0.5% to 15% by weight, preferably from 0.75% to 12% by weight and especially from 1% to 10% by weight based on the weight of the vegetable.

The hydrolysed protein may be of plant or animal origin and maybe a chemically or enzymatically, hydrolysed protein. For example, the hydrolysed protein may be a chemical hydrolysate prepared from a plant or animal source, an autolysed yeast extract from brewer's or baker's yeast, soy sauce from enzymatically degraded soy sauce or soy and wheat mixtures, or meat flavours based on hydrolysed proteins reacting with other ingredients such as reducing sugars, thiamine or cysteine.

The use of hydrolysed protein or a mixture of hydrolysed protein and salt for the fermentation of vegetable produces an acidity equal to or higher than when salt alone is used even allowing for the fact that hydrolysed protein itself contains acids (levulinic and formic acids in chemically hydrolysed proteins and lactic acid in enzymatically hydrolysed proteins). This can be demonstrated by subtracting the initial acidity (of the acids which already exist in the hydrolysed protein) from the final acidity.

The fermentation process is conveniently carried out by thoroughly mixing the vegetable, preferably in shredded form, with the hydrolysed protein and then pressing in a tank for a few weeks, suitably 3 to 6 weeks, at a temperature from 15.degree. C. to 25.degree. C.

By the fermentation process, solid vegetable and vegetable juice are obtained and, if desired, each may be

pasteurised and canned separately. Accordingly, the present invention also provides solid fermented vegetable or fermented vegetable juice whenever prepared by the process of this invention.

Optionally, the vegetable juice may be mixed with further hydrolysed protein to produce a flavoured seasoning product. The present invention, therefore, also provides a mixture of hydrolysed protein and vegetable juice prepared by the process of the present invention. The mixture of vegetable juice and hydrolysed protein may contain from 25% to 45% by weight and preferably from 30% to 40% by weight of hydrolysed protein based on the weight of the mixture.

The fermented vegetables produced by the process of this invention have a meaty flavour. In addition, the hydrolysed proteins in the fermented vegetables produced by the process of the present invention have a more natural, fermented flavour characteristic owing to the presence of lactic acid, ethanol and esters produced during the fermentation. The flavour of the hydrolysed protein is thus improved, and this is especially marked in chemically hydrolysed proteins.

The following Examples further illustrate the present invention in which parts and percentages are given by weight.

EXAMPLE 1

95 parts of fresh shredded cabbage at 18.degree. C. were mixed with 5 parts of chicken flavoured chemically hydrolysed plant protein containing 45% salt. The salt contributed by the hydrolysed protein is thus 2.25 parts. The hydrolysed protein and shredded cabbage weighing 110 kilograms was mixed well and the cabbage was tightly packed in a tank. The cabbage was covered with layers of plastic liner which were covered with water containing 2% salt on a weight/weight basis. The volume of water used was one third of the volume of the tank. The tank was stored at 20.degree.-23.degree. C. for 4 weeks. Juice samples were collected before and after the fermentation period and their pH and acidity levels were analysed. The pH fell from 5.10 to 3.86 while the acidity increased from 0.60% to 2.33%. The sauerkraut had a chicken type flavour characteristic and had a texture similar to that obtained by normal fermentation using salt. The sauerkraut was afterwards pasteurised and canned.

COMPARATIVE EXAMPLE

A similar procedure to that described in Example 1 was followed except that 97.75 parts of fresh shredded cabbage were mixed with 2.25 parts of salt and fermented in the absence of any hydrolysed protein. The sauerkraut did not have a meaty flavour and the pH fell from 6.60 to 3.44 while the acidity increased from 0.07% to 1.70%. The increase in acidity of 1.63 is therefore not as great as that during fermentation using hydrolysed plant protein in Example 1 which is 1.73.

EXAMPLE 2

96 parts of fresh shredded cabbage at 18.degree. C., 2.8 parts of chicken flavoured chemically hydrolysed plant protein containing 45% salt and 1.2 parts salt were mixed and treated in a similar manner to that described in Example 1. After fermentation, the sauerkraut had a chicken flavour, an acidity of 1.82% and a pH of 3.81.

EXAMPLE 3

A similar procedure to that described in Example 1 was followed but using 93.9 parts cabbage and 6.1 parts of a beef flavoured hydrolysed plant protein containing 37% salt. The pH of the sauerkraut was 3.86 and the acidity increased from 0.67% to 2.70%. The sauerkraut had a beef flavour characteristic.

EXAMPLE 4

A similar procedure to that described in Example 1 was followed but using only 2.6 parts of the chicken flavoured chemically hydrolysed protein containing 45% salt with 97.4 parts of shredded fresh cabbage. The sauerkraut had a chicken flavour, an acidity of 2.32% and a pH of 3.88.

EXAMPLE 5

A similar procedure to that described in Example 1 was followed but using 7.2 parts of the chicken flavoured chemically hydrolysed protein containing 45% salt and 92.8 parts of cabbage. The sauerkraut had a chicken flavour, an acidity of 2.0% and a pH of 3.96 and the texture was even firmer than that of Example 1.

EXAMPLE 6

A similar procedure to that described in Example 1 was followed wherein the flavoured sauerkraut juice obtained was pasteurised and canned. The juice had a natural chicken flavour characteristic and is suitable for use in cooking.

EXAMPLE 7

A similar procedure to that described in Example 3 was followed wherein the flavoured sauerkraut juice obtained was pasteurised and canned. The juice had a natural beef flavour characteristic and is suitable for use in cooking.

EXAMPLE 8

A similar procedure to that described in Example 1 was followed wherein 64 parts of the sauerkraut juice obtained was mixed with a further 36 parts of the chicken flavoured chemically hydrolysed plant protein containing 45% salt to produce a chicken flavoured seasoning product.

EXAMPLE 9

A similar procedure to that described in Example 3 was followed wherein 58 parts of the sauerkraut juice obtained was mixed with a further 42 parts of a beef flavoured hydrolysed plant protein containing 37% salt to produce a beef flavoured seasoning product.

* * * * *