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A Chef's Guide to Patent Protections Available for Cooking Techniques and Recipes in the Era of Postmodern Cuisine and Molecular Gastronomy

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A Chef's Guide to Patent Protections Available for Cooking Techniques and Recipes in the Era of Postmodern Cuisine and Molecular Gastronomy

I. INTRODUCTION

ACROSS THE GLOBE, talented chefs are battling for recognition within the culinary field.¹ In the current era of postmodern cuisine where molecular gastronomy is on the rise,² a reevaluation of the patent protections available for unique food techniques and recipes is necessary. As chef and molecular gastronomist Homaro Cantu or Wylie Dufresne's food creations prove,³ there is no question that there are numerous talented chefs now incorporating science into their kitchens. However, whether these chefs may obtain patent protection over their innovative cooking techniques and creations is not as clear.

The intellectual property protections available for culinary works can have vast effects on restaurant owners and chefs. For example, patent protections can positively impact the food industry by influencing creativity in the kitchen and motivating chefs to come up with unique culinary ideas. On the other hand, patent protections can also negatively impact the culinary industry. For example, requiring restaurants to pay for the rights to use various cooking techniques, or prohibiting them from preparing certain recipes, may hurt the restaurant industry by limiting a chef's ability in the kitchen. In addition, those restrictions resulting from patent protection may raise costs, thereby forcing restaurants to raise prices. Although there are obvious negatives to affording patent protection to common recipes, the patent system should not deprive the creative chef of benefiting from her

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^{1.} See generally Richard J. Scholem, *Top Chefs You Never Heard Of*, N.Y. TIMES, Nov. 15, 1998, *available at* http://www.nytimes.com/1998/11/15/nyregion/top-chefs-you-never-heard-of.html?src=pm&pagewanted=1 (explaining the popularity of talented chefs around the world).

^{2.} See infra Part III.

^{3.} See infra Part III.

inventions—especially if her recipe or cooking technique is extremely unique. Food creations such as wine ice cream, stuffed pizza crust, and edible paper are examples of unique food creations that deserve patent protections.⁴ Those chefs who are scientists in the kitchen should be afforded patent protection to properly encourage and reward their creativity and originality.

Part II of this Comment outlines the current state of the law in the area of patent protection for food techniques and recipes.⁵ Part III discusses postmodern cuisine and the rise in molecular gastronomy.⁶ Part IV analyzes the pros and cons for patentability,⁷ and suggests that patent protections for extremely unique food techniques and recipes are necessary in today's culinary industry.⁸ Part V discusses the alternatives to patent protection that are available to the culinary world.⁹

II. PATENTABILITY: LEGAL FRAMEWORK

Patent protection is derived from the United States ("U.S.") Constitution and is codified in the U.S. Code.¹⁰ While the Code sets out the basic statutory framework for patentability, it does not specifically address food techniques and recipes.¹¹ United States Patent and Trademark Office ("USPTO") materials and relevant case law are more informative on this subject.

A. Legal Authority

The U.S. Constitution is the key source of patent protection in the United States.¹² It provides that Congress has the power to "promote the Progress of Science and useful Arts, by securing for limited Times to . . . Inventors the exclusive right to their respective . . . Discoveries."¹³ This constitutional authority allows the USPTO to issue patents.¹⁴

A patent is defined as a "property right granted by the Government... to an inventor to exclude others from making, using, offering for sale, or selling the invention throughout the United States... for a limited time in exchange for public

13. Id.

^{4.} See infra Part III.

^{5.} See infra Part II.

^{6.} See infra Part III.

^{7.} See infra Part IV.

^{8.} See infra Part IV.

^{9.} See infra Part V.

^{10. 35} U.S.C. § 101 et seq. (2012); Edwin L. Harding, Food Patents in the Courts, 12 FOOD DRUG COSM. L. J. 271, 271 (1957).

^{11.} See Harding, supra note 10, at 271.

^{12.} See U.S. CONST. art. 1, § 8, cl. 8.

^{14.} The USPTO: Who We Are, USPTO.GOV, http://www.uspto.gov/about/index.jsp (last updated July 8, 2014, 11:26 AM).

disclosure of the invention when the patent is granted.¹⁵ The purpose of issuing patents "is to encourage creativity, inventiveness and societal contribution by granting inventors legal rights, which allow them to protect their inventions.¹⁶

Congress codified patent protection in Section 35 of the U.S. Code.¹⁷ According to 35 U.S.C. § 101, "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.¹⁸ There are three types of patents available for inventors: utility, design, and plant.¹⁹ A utility patent is granted to an individual who invents or discovers any new and useful process or composition of matter.²⁰ Additionally, anyone who invents a new and useful machine, article of manufacture, or improvement thereof, may receive utility patent protection.²¹ A design patent is issued for a new, ornamental, and original design for an article of manufacture.²² Lastly, a plant patent "may be granted to anyone who invents or discovers and asexually reproduces any distinct and new variety of plant.²³

To receive patent protection, an inventor must file a patent application with the USPTO.²⁴ The USPTO reviews the application and makes a determination on patentability.²⁵ Unlike the copyright system, where protection immediately attaches once the work is fixed into a tangible form,²⁶ patent protection is not automatically awarded upon invention—it must be granted through the application process.²⁷

The conditions for patentability include novelty²⁸ and non-obvious subject matter.²⁹ To satisfy the non-obvious requirement, the patent examiner must ask "whether the process would be obvious to someone with 'ordinary skill in the art' at

23. Patents, supra note 15.

^{15.} *Patents*, USPTO.GOV, http://www.uspto.gov/patents/index.jsp (last updated Sept. 29, 2014, 9:13 AM) (internal quotations omitted).

^{16.} Emily Cunningham, Protecting Cuisine Under the Rubric of Intellectual Property Law: Should the Law Play A Bigger Role in the Kitchen?, 9 J. HIGH TECH. L. 21, 32 (2009) (footnote omitted).

^{17.} See 35 U.S.C. § 101 (2012).

^{18.} Id.

^{19.} Patents, supra note 15.

^{20.} General Information Concerning Patents, USPTO.GOV, http://www.uspto.gov/patents/resources/general _info_concerning_patents.jsp#heading-3 (last updated Apr. 11, 2012).

^{21.} Id.

^{22. 35} U.S.C. § 171 (2012).

^{24.} General Information Concerning Patents, supra note 20.

^{25.} Id.

^{26.} COPYRIGHT BASICS 1, 2 (U.S. Copright Office, May, 2012), *available at* http://www.copyright.gov/circs/ circ01.pdf.

^{27.} General Information Concerning Patents, supra note 20.

^{28. 35} U.S.C. § 102 (2012).

^{29.} Id. § 103 (2012).

the time³⁰ the patent application was filed.³¹ Under the novelty requirement, a patent examiner must determine whether "the claimed invention was patented, described in a printed publication, or in public use, on sale, or otherwise available to the public before the effective filing date of the claimed invention.³² If the statutory requirements of novelty and non-obviousness are satisfied and a process is in fact patentable, legal protection will be granted to the inventor for a limited term. Utility and plant patent protection last for twenty years.³³ Design patent protection lasts for fourteen years.³⁴ After a patent term expires, the invention is then considered part of the public domain and is vulnerable to copying and use.³⁵ Therefore, once "the patent has expired anyone may make, use, offer for sale, or sell or import the invention without permission of the patentee, provided that matter covered by other unexpired patents is not used.³⁶ Additionally, an individual cannot apply to renew an expired patent. This is essentially due to the novelty requirement—an invention must be new to receive patent protection.³⁷

B. Recipes and Cooking Techniques as Patentable Inventions

Case law suggests that unique recipes and cooking techniques may be considered patentable inventions in certain instances. For example, in *Publications International, Ltd. v. Meredith Corp.*,³⁸ the U.S. Court of Appeals for the Seventh Circuit indicated that patent protections may be afforded in some circumstances for recipes because "[p]rotection for ideas or processes is the purview of patent."³⁹ While copyright protections are unavailable for recipes, the court recommended that chefs look to patent law to protect their culinary creations.⁴⁰

In the culinary field, different types of patents may offer protection. For example, design patents may be useful for chefs. Unlike a "utility patent" which "protects the way an article is used and works, ... a 'design patent' protects the way

^{30.} Leslie A. Gordon, *Patently Delicious*, ABA J. (Oct. 2012), http://www.abajournal.com/magazine/artice/p atently_delicious_meat_specialist_seeks_to_patent_a_certain_cut_of_meat/ (quoting Santa Clara University law professor Tyler Ochoa).

^{31. 35} U.S.C. § 103 (2012). The Leahy-Smith America Invents Act, enacted in 2011, changed the non-obvious subject matter requirement from "first to invent" to "first to file." *Id.*

^{32. 35} U.S.C. § 102(a) (2012).

^{33.} Patents for Inventors, USPTO.GOV, http://www.uspto.gov/inventors/patents.jsp (last updated July 31, 2013, 12:55 PM).

^{34.} Id.

^{35.} See 35 U.S.C. § 154 (2012) (stating that a patent's term only lasts for 20 years from the filing date).

^{36.} General Information Concerning Patents, supra note 20.

^{37. 35} U.S.C. § 102 (2012).

^{38. 88} F.3d 473 (7th Cir. 1996).

^{39.} *Id.* at 481.

^{40.} *Id. But see* Barbour v. Head, 178 F. Supp. 2d 758 (S.D. Tex. 2001) (denying a motion to dismiss on the grounds that a genuine issue of material fact existed as to whether recipes represented unprotected facts or protected expression).

an article looks."⁴¹ Thus, a design patent can be used to protect the aesthetic appearance of a food product.⁴² However, "[o]f the three primary types of patents . . . utility is [often] the relevant option for the culinary industry."⁴³ A recipe or food technique may be protected as a utility patent if the invention is considered a process or composition of matter.⁴⁴ To receive patent protection, the recipe or food technique must satisfy the novel and non-obvious requirements.⁴⁵ For example, a recipe cannot merely add or eliminate common ingredients to be awarded patent protection.⁴⁶ Rather, the relevant standard for recipe patentability is whether one's recipe would be "obvious to someone skilled in the art of cooking."⁴⁷ If the recipe is in fact obvious, it will not be patentable.⁴⁸ Accordingly, a recipe must pass a high threshold of uniqueness to be patented.

Further, one cannot patent recipes or food techniques from one's ancestors.⁴⁹ This is because "a patent can only go to the inventor," and if a recipe or food technique has been in one's family for generations, "it implies the recipe's been long disclosed."⁵⁰ To obtain a patent, the inventor must file a patent application within a year from first disclosure, publication, or offer for sale.⁵¹ If an individual comes up with a creative new recipe and serves it to the public, it is considered public disclosure even if the ingredients are not disclosed.⁵² Thus, once a chef serves her unique dish to the public, she only has 365 days to file a patent application.⁵³

^{41.} U.S. PATENT AND TRADEMARK OFFICE, A GUIDE TO FILING A DESIGN PATENT APPLICATION (2013), *available at* http://www.uspto.gov/patents/resources/types/designapp.jsp (citing 35 U.S.C. §§ 101, 171). See Darrell G. Mottley, *Intellectual Property Issues in the Network Cloud: Virtual Models and Digital Three-Dimensional Printers*, 9 J. BUS. & TECH. L. 151, 161 (2014) (footnote omitted) ("Unlike utility patents, design patents are directed to the aesthetic appearance of an article of manufacture.").

^{42.} Robert J. Lewis, *Protecting a Sensory Attribute of Food by Patent*, 18.11 INTELL. PROP. & TECH. L. 17, 17 (Nov. 2006). *See also* Kellogg Co. v. National Biscuit Co., 305 U.S. 111, 119–20 (1938) (discussing how pillow-shaped shredded wheat obtained a design patent for its novel shape).

^{43.} Cunningham, supra note 16, at 32-33 (footnote omitted).

^{44.} P.E. Sharpless Co. v. Crawford Farms, 287 F. 655, 658-59 (2d Cir. 1923).

^{45.} See 35 U.S.C. §§ 102–103 (2012) (setting forth the conditions for patentability: novelty and non-obviousness).

^{46.} Mark Lee, ENT. & INTELL PROP. L. § 4:19 (West 2014) (citing Application of Levin, 178 F.2d 945 (C.C.P.A. 1949); General Mills, Inc. v. Pillsbury Co., 378 F.2d 666 (8th Cir. 1967); American Fruit Growers v. Brogdex Co., 283 U.S. 1 (1931)).

^{47.} Mark Levy, *Can I Patent a Food Recipe?*, INVENTORPRISE (2014), http://store.inventorprise.com/content _articles.php?id=1049. *See also* Cunningham, *supra* note 16 at 33 (footnote omitted) ("The critical inquiry with respect to edible creations is whether the recipe or food product is new and non-obvious in light of other recipes, and in many instances the answer will likely be no.").

^{48.} See, e.g., Ex Parte Kretchman, 2003 WL 23507731 (B.P.A.I. 2003) aff'd, 125 Fed. Appx. 1012 (Fed. Cir. 2005) (holding that a patent for crustless peanut butter and jelly sandwich was invalid due partly to obviousness).

^{49.} Levy, supra note 47.

^{50.} Id.

^{51. 35} U.S.C. § 102(b) (2012).

^{52.} Levy, supra note 47.

^{53.} See 35 U.S.C. § 102(b) (2012).

According to the USPTO, food recipe and product patents fall within Patent Class 426 - Food or Edible Material: Processes, Compositions, and Products.⁵⁴ Although "[i]t is clear that how to achieve a sensory attribute is [in fact] patentable, ... a patent for a food as characterized by a sensory attribute itself[, like a taste profile,] has not [yet] been found."⁵⁵ Nevertheless, examples of successfully patented recipes include: sugarless bakery goods,⁵⁶ a flavor system with high chocolate flavor impact,⁵⁷ toaster cookies,⁵⁸ an ice cream cone with enhanced crispiness,⁵⁹ and ready to bake dough.⁶⁰ Examples of cooking techniques that have received utility patents include: a method for making microwaveable sponge cake,⁶¹ a food product added to improve the texture of breaded foods,⁶² stuffed pizza crust,⁶³ pillow-shaped shredded wheat,⁶⁴ a technique for drying sausages,⁶⁵ and a method for controlling cookie geometry.⁶⁶ Patents for food techniques, such as the patent granted for the process to make dippin' dots, illustrate that "[p]roducers of processed foods may obtain patents ... for the [actual] process used to make the food" and not just the resulting product.⁶⁷ These patent examples confirm how food-related patents are awarded to both compositions of matter and processes. They also demonstrate that food techniques and recipes often cannot be divided into two distinct and separate categories.

In addition to the evidence for culinary patent protection found in successful patent applications, case law illustrates the availability of patent protections for food techniques and recipes. For example, in *P.E. Sharpless Company v. Crawford Farms*,⁶⁸ the U.S. Court of Appeals for the Second Circuit held that a patent for blending two cheese products together to make Roquefort Cheese with a characteristic flavor was valid.⁶⁹ The court stated that "[a] patentable composition

^{54.} Class Number and Title, USPTO.GOV, http://www.uspto.gov/web/patents/classification/selectnumwithti tle.htm (last updated Jul. 10, 2012, 11:08 AM).

^{55.} Lewis, *supra* note 42 at 17–18.

^{56.} U.S. Patent No. 5,804,242 (filed Sept. 8, 1998) (application granted but expired due to nonpayment).

^{57.} U.S. Patent No. 3,733,209 (filed Oct. 6, 1970) (issued May 15, 1973).

^{58.} U.S. Patent No. 6,093,437 (filed May 18, 1999) (issued July 25, 2000) (application granted but expired due to nonpayment).

^{59.} U.S. Patent No. 6,824,799 (filed Oct. 24, 2000) (issued Nov. 30, 2004).

^{60.} U.S. Patent No. 5,560,946 (filed Dec. 20, 1994) (issued Oct. 1, 1996).

^{61.} U.S. Patent No. 6,410,074 (filed Feb. 9, 2001) (issued June 25, 2001).

^{62.} U.S. Patent No. 6,288,179 (filed Apr. 24, 2000) (issued Sept. 11, 2001).

^{63.} U.S. Patent No. 6,048,556 (filed Oct. 30, 1998) (issued Apr. 11, 2000).

^{64.} U.S. Patent No. 548,086 (issued Oct. 15, 1895).

^{65.} U.S. Patent No. 2,211,490 (issued 1940); see In re Reijers, No. 2014-1052, slip op. at 2–3 (Fed Cir. June 5, 2014).

^{66.} U.S. Patent No. 5,374,440 (filed Dec. 23, 1992) (issued Dec. 20, 1994).

^{67.} Naomi Straus, *Trade Dress Protection for Cuisine: Monetizing Creativity in A Low-IP Industry*, 60 UCLA L. REV. 182, 185 n.8 (2012) (citing Dippin' Dots, Inc. v. Frosty Bites Distribution, LLC, 369 F.3d 1197, 1200 (11th Cir. 2004)).

^{68. 287} F. 655 (2d Cir. 1923).

^{69.} Id. at 658.

of matter may well result or be formed by the intermixture of two or more ingredients, which develop a different or additional property... [that] several ingredients individually do not possess in common."⁷⁰ The court further reasoned that "[t]here is no restriction as to the nature of the composition which may be patented."⁷¹ Similarly, the U.S. Supreme Court has held that several patents directed towards improving the process for manufacturing flour were valid.⁷² A District of Columbia Circuit Court of Appeals case held that an ice cream bar with a stick was patentable subject matter.⁷³ Additionally, in *Popsicle Corp. v. Weiss*,⁷⁴ the U.S. District Court for the Southern District of New York held that the process of making a frozen popsicle was a valid patent.⁷⁵ Even though these cases are older, they illustrate how unique food techniques that come into the market and break waves in the culinary industry can receive patent protection.

A somewhat recent case, *Jack Guttman, Inc. v. Kopykake Enterprises, Inc.*,⁷⁶ illustrates that food patents can be valid and enforceable against infringers. In that case, the Federal Circuit vacated and remanded the U.S. District Court for the Southern District of Ohio's order, which denied assignee's motion for a preliminary injunction against a cake decorating system manufacturer for patent infringement.⁷⁷ Jack Guttman, Inc., the assignee, has the patent rights for the technology that allows it to copy an image onto edible substrate sheets for placement on iced baked goods.⁷⁸ An example of the use of this technology is when a baker produces "a birthday cake decorated with an edible version of the birthday child's photograph."⁷⁹ This technology is an example of a successfully patented food technique.

Although food products and recipes may be eligible for patent protection, courts have been reluctant to recognize these patents unless a high threshold of originality and creativity is met.⁸⁰ For example, in *Application of Levin*,⁸¹ the Court of Customs and Patent Appeals stated:

[N]ew recipes or formulas for cooking food which involve the addition or elimination of common ingredients, or for treating them in ways which differ from the former practice, do not amount to invention merely because

^{70.} Id.

^{71.} Id.

^{72.} See Cochrane v. Deener, 94 U.S. 780 (1876).

^{73.} In re Burt, 24 F.2d 273, 274 (D.C. Cir. 1928).

^{74. 40} F.2d 301 (S.D.N.Y. 1929).

^{75.} *Id.* at 302.

^{76. 302} F.3d 1352 (Fed. Cir. 2002).

^{77.} Id.

^{78.} Id. at 1354. See also U.S. Patent No. 6,319,530 (filed Nov. 18, 1998) (issued Nov. 20, 2001).

^{79.} Jack Guttman, Inc., 302 F.3d at 1354.

^{80. 1-1} Chisum on Patents § 1.02(6).

^{81. 178} F.2d 945 (C.C.P.A. 1949).

it is not disclosed that, in the constantly developing art of preparing food, no one else ever did the particular thing upon which the applicant asserts his right to a patent. In all such cases, there is nothing patentable unless the applicant by a proper showing further establishes a coaction or cooperative relationship between the selected ingredients which produces a new, unexpected, and useful function.⁸²

The court held that the application for an improved method for making butter was properly denied, and affirmed the conclusion that "appellant had merely associated well-known ingredients in a unitary composition, with no new or unexpected cooperative relationship between them."⁸³ However, the court explained that "[i]nvention may reside in a composition of matter formed by the intermixture of two or more ingredients which results in a product possessing characteristics of utility that are new, additional and materially different from the property or properties which the several ingredients individually do not possess in common."⁸⁴

It has been said that "[u]tility patents require such a high standard of 'originality' that food items rarely qualify, especially if they are concoctions of common ingredients."⁸⁵ Thus, a chef looking to patent her creation as a utility patent *must* ensure that the cooking technique or recipe is sufficiently useful, novel, and non-obvious.⁸⁶ Additionally, if a food patent would preclude a chef from doing her work, a court may be reluctant to confirm protection.⁸⁷

Although a novel and non-obvious food process or technique may be patented, a product of nature cannot.⁸⁸ For example, a patent application was recently filed for a "Vegas Strip Steak" cut of beef, sparking many discussions among the legal field.⁸⁹ "The 14-ounce cut of beef, which comes from a part of the cow usually reserved for hamburger[s], was discovered by an Oklahoma State University meat specialist...."⁹⁰ Although the meat itself cannot be "patented because it is a

^{82.} Id. at 948.

^{83.} Id.

^{84.} Id. (citing P.E. Sharpless Co. v. Crawford Farms, Inc. 287 F. 655 (2d Cir. 1923)).

^{85.} Malla Pollack, Intellectual Property Protection for the Creative Chef, or How to Copyright A Cake: A Modest Proposal, 12 CARDOZO L. REV. 1477, 1482 (1991) (footnotes omitted).

^{86.} General Mills, Inc. v. Pillsbury Co., 378 F.2d 666, 667 (8th Cir. Minn. 1967).

^{87.} Lewis, supra note 42, at 18.

^{88.} Gordon, *supra* note 30. Despite the fact that a product of nature cannot be patented, some food items may receive patent protection as a plant patent. For example, Honeycrisp apples were invented at the University of Minnesota and received patent protection until the patent expired in 2008. *See Fruit-Breeding at the University of Minnesota*, UNIV. MINNESOTA (Apr. 18, 2006), http://www.maes.umn.edu/prod/groups/cfans/@p ub/@cfans/@maes/documents/asset/cfans_asset_411405.pdf. For a discussion on why plant patents are viewed by some as "deeply problematic," *see* Glyn Moody, *The Main Problem with Patented GM Food is the Patent*, *Not the Fact that it's GM*, TECH DIRT (Jan. 7, 2013, 9:49 AM), https://www.techdirt.com/articles/20121229/03344321 523/main-problem-with-patented-gm-food-is-patent-not-fact-that-its-gm.shtml.

^{89.} Gordon, supra note 30.

^{90.} Id.

product of nature," "the process of extracting steak from the beef carcass" with unique knife strokes may be patentable if it is deemed a novel and non-obvious process.⁹¹ It is therefore important for a chef looking to patent a technique to sufficiently distinguish the product of nature (such as a meat), which cannot receive protection, from the technique itself, which can potentially receive protection.

A food technique or creation can be patented "and will be sustained where there is a real contribution to the art."⁹² To patent a food product that constitutes a mixture or recipe, "a new or unobvious result must be obtained, resulting in a product having characteristics of utility that are additional and materially different from the property... which the several ingredients individually do not possess in common."⁹³ In other words, "there must be a... cooperative relationship between the selected ingredients which produces a new, unexpected and useful function."⁹⁴ Thus, if the food product or technique lacks creative results, it will not be patented.⁹⁵

III. POSTMODERN CUISINE AND THE RISE OF MOLECULAR GASTRONOMY

Patent protection for food techniques is more important in today's world due to the rise in culinary creativity and in particular, molecular gastronomy. According to an American Bar Association article, the USPTO approved close to 1,200 patents related to food or edible material in 2011.⁹⁶ The explosion of cooking shows such as *Iron Chef*,⁹⁷ *Top Chef*,⁹⁸ *Diners, Drive-Ins and Dives*,⁹⁹ and *Chopped*¹⁰⁰ may explain the number of food-related patent applications. With the increase in popularity of competitive cooking shows, more individuals are exposed to and inspired by creative recipes, cooking techniques, and skills. Some of these contestants, such as former *Top Chef* contestant Marcel Vigneron, even employed molecular gastronomy on television to impress the judges and viewers.¹⁰¹

^{91.} Id. (quoting Santa Clara University law professor Tyler Ochoa).

^{92.} Harding, supra note 10, at 288.

^{93.} Id.

^{94.} Id.

^{95.} Id.

^{96.} Gordon, *supra* note 30.

^{97.} Iron Chef America, FOOD NETWORK, http://www.foodnetwork.com/iron-chef-america/index.html (last visited Nov. 23, 2014).

^{98.} Top Chef, BRAVO, http://www.bravotv.com/top-chef (last visited Nov. 23, 2014).

^{99.} Diners, Drive-Ins and Dives, FOOD NETWORK, http://www.foodnetwork.com/diners-drive-ins-and-dives/index.html (last visited Nov. 23, 2014).

^{100.} Chopped, FOOD NETWORK, http://www.foodnetwork.com/chopped/index.html (last visited Nov. 23, 2014).

^{101.} Former 'Top Chef' Contestant Marcel Vigneron Gets a Cooking Show on Syfy, MOLECULAR GASTRONOMY NETWORK (Mar. 20, 2011), http://www.moleculargastronomynetwork.com/39-news/Former-Top-Chef-contest ant-Marcel-Vigneron-gets-a-cooking-show-on-Syfy.html [hereinafter Marcel Vigneron].

"Molecular Gastronomy" can be described as a discipline of food science.¹⁰² It is also commonly defined as "a style of cuisine in which chefs explore culinary possibilities by borrowing tools from the science lab and ingredients from the food industry."¹⁰³ Molecular gastronomy is unique because it "blends physics and chemistry to transform the tastes and textures of food."¹⁰⁴ For example, Chef Vigneron commonly utilizes liquid nitrogen (a method of molecular gastronomy) in preparing his meals.¹⁰⁵

Another example of the increasing use of molecular gastronomy can be found in Homaro Cantu's kitchen-turned-science lab.¹⁰⁶ Cantu, who has taken advantage of his talents in the "new era of Postmodern Cuisine,"¹⁰⁷ has many food-related patents pending with the USPTO.¹⁰⁸ Known as the "real life Willy Wonka,"¹⁰⁹ Cantu has invented food products such as edible, flavored paper (which he prints his daily menu on)¹¹⁰ and flavor-altering utensils.¹¹¹ Wylie Dufresne, owner and head chef of New York's WD~50 restaurant, also "helped pioneer envelope-pushing molecular gastronomy."¹¹² Dufresne is known for molecular gastronomy techniques including serving pizza in pebble form, deep frying mayonnaise, and making noodles out of only shrimp and "meat glue."¹¹³

With the rise of chefs in the molecular gastronomy field, patent protection has become essential. Food "[s]cience has... helped overcome the perception expressed in some early cases that food development is 'cook's work' and unworthy of patent protection."¹¹⁴ Additionally, "[g]rowth in the science of foods and food processing," as demonstrated in molecular gastronomy, has "enabled better scientific description of an invention" for the patent application process.¹¹⁵ This is because one of the hurdles a chef faces in filing a patent is correctly describing her food technique or recipe in a manner likely to receive patent protection.¹¹⁶ With a molecular gastronomy-based recipe or food technique, it is more likely that the

^{102.} What is Molecular Gastronomy?, MOLECULARRECIPES.COM, http://www.molecularrecipes.com/molecular-gastronomy/ (last visited Oct. 14, 2013).

^{103.} Id.

^{104.} Id.

^{105.} Marcel Vigneron, supra note 101.

^{106.} Homaro Cantu, STARCHEFS.COM (Nov. 2005), http://www.starchefs.com/chefs/rising_stars/2005/chica go/html/bio_h_cantu.shtml.

^{107.} Id. "Postmodern Cuisine" is a term used to describe futuristic food. Id.

^{108.} Id.

^{109.} Id.

^{110.} Id.

^{111.} Martha Neil, Mixing IP with MMMMMM, 6 ABA J. E-REPORT 3 (May 11, 2007).

^{112.} Sophie Brickman, *Operation Surprise Wylie*, NEW YORKER (Apr. 9, 2014), http://www.newyorker.co m/online/blogs/culture/2014/04/operation-surprise-wylie.html?.

^{113.} Id.

^{114.} Lewis, *supra* note 42 at 18.

^{115.} Id.

^{116.} *Id.* at 17.

patent application will be granted because it is considered more akin to a scientific invention in the eyes of the patent examiner.

IV. CHEFS SHOULD BE AFFORDED PATENT PROTECTIONS FOR THEIR UNIQUE COOKING TECHNIQUES AND RECIPES

There is a strong debate among individuals in the culinary industry and legal field as to whether intellectual property protections, and in particular patents, should be afforded to cooking techniques and recipes.¹¹⁷ Although there are compelling arguments for both sides, patent protections should be awarded to novel cooking techniques and recipes because of the culinary creativity represented in the current era of postmodern cuisine and molecular gastronomy.

A. The Pros and Cons for Patentability

Homaro Cantu is one of many "pioneer[s] in the movement to expand intellectual property laws to certain culinary related creations."¹¹⁸ Despite the potential expense of the patent process (including application and attorneys' fees), Cantu, like others, has chosen to file patent applications for his food creations because he believes the benefits of licensing his creations to large food companies outweigh the costs.¹¹⁹ Chefs such as Cantu have invested in their work by attending culinary school¹²⁰ and devoting their lives to creating new food products that will impress even the most educated "foodie." Patent protections should be available as a reward for these scientific-like investments. Additionally, if chefs could more easily obtain patent protections for their work, this protection would foster creativity and prompt chefs to apply for patents for their new creations.

Patents should be granted for unique cooking techniques and recipes because they are inventions similar to those of any other patent granted by the USPTO. A chef is no different from a scientist in a laboratory, concocting new creations. Therefore, chefs should be able to more easily obtain patent protection for their food techniques and recipes to serve as an incentive for others in the culinary industry to create new and exciting food techniques or products. "[P]atent laws promote th[e] progress [of science and useful arts] by offering a right of exclusion for a limited period as an incentive to inventors [in this case chefs] to risk the often enormous costs in terms of time, research, and development."¹²¹ If anyone can simply re-create a chef's invention or utilize her techniques once revealed, the chef

^{117.} See, e.g., Cunningham, supra note 16, at 22.

^{118.} *Id.* at 26 (citing Neil, *supra* note 111).

^{119.} Meredith G. Lawrence, *Edible Plagiarism: Reconsidering Recipe Copyright in the Digital Age*, 14 VAND. J. ENT. & TECH. L. 187, 202 (2011).

^{120.} Success Stories: Homaro Cantu, LE CORDON BLEU, http://www.chefs.edu/student-life/success-stories/ho maro-cantu (last visited Nov. 4, 2014).

^{121.} Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 480 (1974).

will have less drive to focus her career on inventing new things, rather than just preparing meals that many people have already tasted or are familiar with.

Arguments against patent protections are based on the belief that the culinary industry does not need the incentive provided by patent protection, and that the patent process is too expensive and requires legal expertise.¹²² However, these arguments ignore the new age of molecular gastronomy and postmodern cuisine, where protections should be used to motivate chefs to continue discovering culinary masterpieces. Although the patent process can be expensive, especially if the application is disputed in the future, the potential expense should not deter chefs from protecting their creations. Allowing chefs to protect their creations, while having the opportunity to license their use, is worth the potential expense of the patent process.

Critics also argue that once something is patented it is shared with the public, no longer secret, and thus subject to copying.¹²⁴ However, it is less likely that someone will be able to successfully copy a food technique as unique as those created in the molecular gastronomy field. Further, this argument ignores the fact that creative food techniques and recipes that are patentable are popular and constantly blogged about or discussed by food critics.¹²⁵ Thus, if an individual patents her culinary innovation, and then hears that another chef is using the same technique without a license, the inventor may bring legal action against the infringer.¹²⁶ By doing so, the chef may seek damages or injunctive relief to prevent others from utilizing her patented techniques or products.¹²⁷

Some critics argue that simply filing the patent application would be disastrous because it could expose the recipe or technique to the public upon filing with the USPTO, making it easy for anyone to duplicate it without repercussions.¹²⁸ Although the patent application may be available to the public through the USPTO website once it is published,¹²⁹ if an individual were to steal the idea from the patent application, legal ramifications could result once the patent is granted.¹³⁰ Even though these critics of food protections argue that the patent leaves the creation vulnerable to copying, this argument is no different for any other inventor who files a public patent application. Furthermore, a patent applicant can simply request that

^{122.} See, e.g., Cunningham, supra note 16, at 46-48.

^{123.} Lawrence, *supra* note 119, at 202.

^{124.} See, e.g., Cunningham, supra note 16, at 34-35 (citing Frequently Asked Questions, USPTO.GOV, http://www.uspto.gov/faq/patents.

jsp (last updated July 12, 2012, 9:48 AM)).

^{125.} See Lawrence, supra note 119, at 202 (discussing the recent growth in food blogging).

^{126.} See 35 U.S.C. § 271(e)(4) (2012).

^{127.} Id.

^{128.} See, e.g., Ryan King, Can and Should You Protect Your Recipes?, FINE DINING LOVERS (Sept. 7, 2012), http://www.finedininglovers.com/stories/how-to-protect-recipes/.

^{129.} Frequently Asked Questions, supra note 124.

^{130. 35} U.S.C. § 271 (2012).

their application be marked as "confidential."¹³¹ By doing so, the USPTO cannot reveal anything in the application until it is granted.¹³² This protects chefs from having their ideas stolen during the application process or in the event the patent application is denied.

Critics also argue that patent protection would be detrimental to the culinary industry because it would limit the number of recipes or techniques chefs could employ.¹³³ However, this is not a compelling argument because patent protection would merely provide incentives for chefs to create different and more creative food recipes and techniques, as chefs will know they will be afforded protection and monetary benefits for their efforts. For example, if a chef can get a patent on her technique or food process, she may grant nonexclusive licenses for a fee to other chefs and restaurants so that they can produce and use the invention.¹³⁴ This would benefit the culinary industry and make restaurants that either have licenses to use a patent, or which employ chefs with patented techniques, much more desirable to individual diners.¹³⁵ Formal protection would not only benefit established chefs and restaurants, but it would also provide unknown chefs with a new avenue of economic recovery. If a chef could patent a creative food technique, then she could gain recognition and revenue by granting non-exclusive licenses to restaurants for the use of her creations.¹³⁶

Even if the patent application is not ultimately granted for a food technique or recipe, simply filing a patent application can be a highly effective marketing tool. An illustration of this effectiveness can be found in the Vegas Strip Steak, which has not yet hit the market, but has many people already talking about it and excitingly awaiting its arrival due to the filed patent application.¹³⁷ Not only are patents good marketing tools, they also bring recognition to their creators within the culinary industry.¹³⁸ Therefore, patents can bring in more customers to restaurants who utilize the patents, thereby increasing the restaurant's revenue.

Affording patent protection to food techniques and recipes is consistent with the core purpose of patent rights: to promote the progress of science and the useful arts by securing for a limited time to inventors the exclusive right to their discoveries.¹³⁹ The unique food techniques and recipes that chefs have been creating across the country can certainly be described as inventive, and should be secured for a limited

^{131.} Id. § 122(b)(2)(B)(i).

^{132.} Id.

^{133.} See King, supra note 128.

^{134.} See generally Rights in the Invention and Transfer of Rights, USPTO.GOV, http://www.uspto.gov/web/offi ces/pac/mpep/s509.html (last updated Mar. 27, 2014, 10:10 AM).

^{135.} See Gordon, supra note 30.

^{136.} Id.

^{137.} Gordon, supra note 30.

^{138.} See, e.g., Homaro Cantu, supra note 106.

^{139.} U.S. CONST. art. 1, § 8, cl. 8.

A Chef's Guide to Patent Protections

time. "Providing protection to the chefs who design the culinary creations consumed by so many may contribute to and enhance the success of th[e culinary] industry."¹⁴⁰ In sum, there are many compelling reasons why patent protections should be granted for extremely unique food techniques and recipes that outweigh the potential negatives.

B. Patent Protections are Afforded to Chefs but May be Assigned to Restaurant Owners

If patent protection is afforded to cooking techniques and recipes, the next issue that must be addressed is who should receive the patent rights. For example, if a chef creates a new recipe or cooking technique while working under contract for a restaurant, who should own the rights to the creation—the chef or the restaurant? Awarding patent protection to food products and techniques opens up this discussion as to who should be afforded the protections in the culinary industry for various situations.

Unlike copyright law, patent protection can only be granted to the inventor. "[C]opyright law, through its work-made-for-hire doctrine, provides for the nonnatural person or the corporation to 'be' the author."¹⁴¹ The "work made for hire" doctrine under the Copyright Act of 1976 states that for a work prepared by an employee within the scope of her employment, the employer owns the copyright unless expressly agreed otherwise in a written instrument signed by them.¹⁴² However, if a contract states that an employee is similar to an independent contractor or there is no employment relationship, the employee would hold the rights to the intellectual property.¹⁴³ In contrast, "[u]nder patent law, the naturalperson inventors must always be listed in the patent documents, even if they preassigned the title to inventions they develop."¹⁴⁴ Although patent protection is only awarded to the inventor, it is possible for a restaurant to purchase the patent rights from the inventor.¹⁴⁵

Although a named inventor on a patent application must be the chef if she is the one who comes up with the technique or recipe, the restaurant she works for could be the assignee of the patent if her employment contract states that anything she invents is restaurant property. To illustrate, consider the way in which research is

^{140.} Caroline M. Reebs, *Sweet or Sour: Extending Copyright Protection to Food Art*, 22 DEPAUL J. ART, TECH. & INTELL. PROP. L. 41, 43 (2011) (footnote omitted).

^{141.} Sean M. O'Connor, Abstract: Hired to Invent vs. Work Made for Hire: Resolving the Inconsistency Among Rights of Corporate Personhood, Authorship, and Inventorship, 35 SEATTLE U. L. REV 1227 (2012), http://digitalcommons.law.seattleu.edu/sulr/vol35/iss4/10/ [hereinafter Abstract].

^{142. 17} U.S.C. §§ 101, 201 (2012).

^{143.} See id. § 201.

^{144.} Abstract, supra note 141.

^{145.} Sean M. O'Connor, Hired to Invent vs. Work Made for Hire: Resolving the Inconsistency Among Rights of Corporate Personhood, Authorship, and Inventorship, 35 SEATTLE U. L. REV 1227, 1239 (2012).

done at universities. For example, Professor A is working for University B and discovers X through her research. A's contract agreement with University B states that anything A discovers belongs (at least in part) to University B. Thus, the patent for X would list Professor A as the inventor but belong to both of them, and both A and B would profit. Restaurants could do the same thing as the University. Take another more modern scenario: if a chef is featured on *Chopped* and comes up with a creative technique on the show, who has the right to file a patent for this technique? Contractual language would have to state that if a chef comes up with a new cooking technique on the show, the show has the rights to the patent as assignee. Otherwise, the chef could file a patent application independently.

If a chef agrees to grant non-exclusive licenses to restaurants for her food invention, this would be economically beneficial to the chef and advantageous to diners who would like to taste the food product or technique in various restaurants. However, there are potential negatives to the restaurant not owning the patent rights to its chef's culinary creations. If, for example, the chef charges high costs for non-exclusive licenses to use her creation, this will drive up the price for the consumer. On the other hand, demand would also be higher, counterbalancing any potential negative effects. If an employment contract states that any intellectual property the chef creates shall be restaurant property, this would certainly give restaurants more power. Thus, if patent protections become more widespread in the culinary industry, chefs should carefully consider what their employment contracts say regarding any food inventions they create on the job.

V. Alternatives to Patent Protection

In the legal and culinary fields, individuals have debated whether various types of intellectual property protections should be afforded to recipes and cooking techniques.¹⁴⁶ This debate is not just centered on patent law, but also includes whether intellectual property protections such as copyright and trade secret law should be awarded for the culinary industry.¹⁴⁷

A. Patent versus Copyright Protection

Some legal scholars argue that copyright protection should be afforded to recipes and cooking processes.¹⁴⁸ They claim that copyright protection is appropriate

^{146.} See e.g., Cunningham, supra note 16 (arguing that intellectual property protections such as copyright, trademark, and trade dress do not encompass recipes and food creations, nor should they); Reebs, supra note 138 (arguing for the extension of copyright protection to food art); see also N.Y. Pizzeria, Inc. v. Syal, No. 3:13-CV-335, 2014 WL 5343523 (S.D. Tex. Oct. 20, 2014) (holding that the flavors and plating of an Italian restaurant's courses were not protectable trademarks under the Lanham Act, but suggesting that plating could be protected under trade dress under high standards that the restaurant here did not meet).

^{147.} See supra note 146 and accompanying text.

^{148.} See King, supra note 128 (discussing how legal scholars debate the world of culinary copyright); Pollack, supra note 85, at 1478 (proposing the extension of copyright protection for food); Reebs, supra note

because recipes should be considered literary works within the subject matter of copyright.¹⁴⁹ It has been stated that "original recipe creations, beyond the most basic recipes like apple pie a la mode and chocolate chip cookies, should be granted copyright protection no different from the next great American novel."¹⁵⁰ Because some culinary creations may be more akin to art, which is not protected by patent law but rather copyright law, food creations, copyright proponents argue, should be legally protected like art.¹⁵¹ Those that support copyright protection argue that "the culinary industry could benefit from a similar system of protections designed to protect the rights of chefs and publishers in their recipes."¹⁵² However, there is no explicit copyright protection available for recipes or cooking techniques under the Copyright Act of 1976 or relevant copyright case law.¹⁵³ As an illustration, the U.S. Court of Appeals for the Seventh Circuit has held that recipes contained in a cookbook of yogurt dishes were not copyrightable.¹⁵⁴ The court reasoned that the recipes lacked originality, and the procedure for preparing the dishes was an uncopyrightable procedure, process, or system under section 102(b) of the Copyright Act of 1976.¹⁵⁵ Recipes "are not subject to copyright protection," so they "may be protected only if they meet the more stringent requirements of patent law."156

Although some individuals argue copyright protection should be afforded for food recipes and techniques regardless of the court's rejection to award this type of protection, patent protection is more appropriate for this field. Patent duration is significantly limited compared to copyright protection. Copyright protection, which can last for the life of an author plus seventy years,¹⁵⁷ is entirely too long for food creations, especially in comparison to the twenty-year patent protection.¹⁵⁸ Patent protection strikes the proper balance between protecting cooking inventions and allowing others in the industry to utilize the inventions. Twenty years of

^{138,} at 74 (2011) (encouraging the expansion of coverage for food art under the Copyright Act); Michael Goldman, *Cooking and Copyright: When Chefs and Restaurateurs Should Receive Copyright Protection for Recipes and Aspects of Their Professional Repertoires*, 23 SETON HALL J. SPORTS & ENT. L. 153 (2013) (stating that copyright should extend to most recipes).

^{149.} Michael Goldman, supra note 148, at 168.

^{150.} Id. at 186.

^{151.} Reebs, *supra* note 140, at 74 (encouraging the expansion of coverage for food art under the Copyright Act).

^{152.} Goldman, *supra* note 148, at 172.

^{153.} Cunningham, supra note 16, at 26–27.

^{154.} Publications Int'l, Ltd. v. Meredith Corp., 88 F.3d 473, 475 (7th Cir. 1996).

^{155.} Id. at 481.

^{156.} See Christopher J. Buccafusco, On the Legal Consequences of Sauces: Should Thomas Keller's Recipes Be Per Se Copyrightable?, 24 CARDOZO ARTS & ENT. L.J. 1121, 1130 (2007); but see Barbour v. Head, 178 F. Supp. 2d 758 (S.D. Tex. 2001) (denying a motion to dismiss on the grounds that a genuine issue of material fact existed as to whether recipes represented unprotected facts or protected expression).

^{157.} Duration of Copyright, U.S. COPYRIGHT OFFICE, available at http://www.copyright.gov/circs/circ15a.pdf (last updated Aug. 2011).

^{158.} Patents for Inventors, supra note 33.

protection is the perfect balance to give chefs time to capitalize from their creations, yet promote and foster development in the culinary field. If chefs could receive copyright protection on food techniques and recipes, they could sit on these rights and deprive individuals from making or eating new food creations for much longer. A protection that lasts for the life of the creator plus seventy years¹⁵⁹ is entirely too long for a food invention monopoly when there are constantly changing tastes and new creations in the cooking industry.

B. Trade Secret Protection as an Alternative to Patent Protections in Limited Circumstances

Another alternative to patent protection for food recipes and techniques can be found in trade secret law. A "trade secret" is defined as:

Information, including a formula, pattern, compilation, program, device, method, technique, or process that: (i) derives independent economic value... from not being generally known to, and not being readily ascertainable by proper means by others who can obtain economic value from its disclosure or use, and (ii) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.¹⁶⁰

Trade secret protection may be appropriate in limited circumstances because a trade secret does not have durational restraints like patents, and has the ability to keep recipes and techniques confidential.¹⁶¹ Despite the fact that trade secret protection could last even longer than copyright protection, the possibility of reverse engineering and independent creation keeps the trade secret holder's power over the food technique or recipe in check.

Although trade secret protection may be more beneficial than patent or copyright protection in some circumstances, a food technique or recipe may not necessarily be afforded trade secret protection if it does not meet the legal requirements for protection. "A recipe must have limited availability, economic value and relative secrecy to be a trade secret."¹⁶² For example, the U.S. Court of Appeals for the Ninth Circuit has held that trade secret law did not protect dishes offered at an all-you-can-eat Old Country Buffet because cuisine, such as barbecued chicken and macaroni and cheese are American staples and are "undeniably obvious" recipes.¹⁶³ Thus, to protect a recipe or culinary technique through trade secret law, it must not be obvious or known to the general public. However, the

^{159.} Duration of Copyright, supra note 157.

^{160.} UNIF. TRADE SECRETS ACT § 1 (amended 1985), available at http://www.webcitation.org/5bRpOJ20V.

^{161.} Cunningham, supra note 16, at 34-35 (citations omitted).

^{162.} Id. at 35 (footnote omitted).

^{163.} Buffets, Inc. v. Klinke, 73 F.3d 965, 968-69 (9th Cir. 1996).

U.S. Court of Appeals for the Second Circuit has stated that "a trade secret can exist in a combination of characteristics and components, each of which, by itself, is in the public domain, but the unified process, design and operation of which, in unique combination, affords a competitive advantage and is a protectable secret."¹⁶⁴ Therefore, if parts of the recipe or technique may include components in the public domain that are obvious, this will not necessarily prevent the new technique as a whole from receiving trade secret protection.

The formula for Coca-Cola and the recipe for KFC chicken are examples of protectable trade secrets that are not protected by patents or copyrights.¹⁶⁵ To protect these trade secrets, all employees who work with these recipes must sign non-disclosure agreements.¹⁶⁶ Therefore, if they reveal the recipe, legal action under the theory of trade secret protection can be brought against them.¹⁶⁷ Trade secret protection "may be the best option to take for people and companies who want to try and protect recipes for longer than the 20-year protection a patent provides."¹⁶⁸

Because patent protection may not be awarded in certain circumstances, a chef or restaurant should keep in mind that trade secrets might be the best form of protection. The USPTO has not granted many patent applications for food techniques or products, and has granted even less applications for recipes.¹⁶⁹ Average recipes may therefore be more appropriately protected by trade secrets. On the other hand, food processes that are closer to the core of invention should receive patent protection.

A chef must also keep in mind that trade secret law does *not* protect against discovery by reverse engineering.¹⁷⁰ "Reverse engineering" means to reproduce a product through detailed examination of its composition.¹⁷¹ For example, if someone could examine and study the composition of a Coca-Cola product and reproduce an identical recipe, this would be completely legal and acceptable under trade secret protection but *not* patent protection. Thus, a chef that wants to protect against reverse engineering should try to obtain patent protection if she has a sufficiently novel and non-obvious recipe or cooking technique.

It is also important to note that a chef will not lose the right to trade secret protection by seeking patent protection.¹⁷² For example, if a chef seeks a patent on

^{164.} Imperial Chem. Indus. Ltd. v. Nat'l Distillers & Chem. Corp., 342 F.2d 737, 742 (1965).

^{165.} King, *supra* note 128.

^{166.} *Id.*

^{167.} Id.

^{168.} Id.

^{169.} Goldman, *supra* note 148, at 176.

^{170.} Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 476 (1974).

^{171.} *Reverse Engineer Definition*, WEBSTER'S DICTIONARY, http://www.merriam-webster.com/dictionary/reverse%20engineer (last visited Nov. 5, 2014).

^{172.} See 2 ROGER M. MILGRIM, MILGRIM ON TRADE SECRETS § 9.02 (2014) ("Trade secret law is pertinent to patent licensing because it provides an independent, complementary form of industrial property which in some

her creation she may request that the application be marked as confidential and not released to the public, as previously discussed in Part IV.A.¹⁷³ If the application is denied, the chef may maintain her secret via trade secret protection.¹⁷⁴ Therefore, chefs around the world should still seek patent protection for their creative cooking techniques and recipes.

Another problem with relying on trade secret rather than patent protection in the culinary world is that a chef cannot be certain that she actually has a protectable trade secret.¹⁷⁵ "Unlike a patent, which is [a] legal monopoly officially issued by the government, there is no way to apply for recognition or certification of a trade secret, and there is no governmental agency that issues any such recognition or certification."¹⁷⁶ A chef should be wary about relying solely on trade secret protection because she cannot be positive her recipe is protected until court action is taken and the judge rules that there is a protectable trade secret.¹⁷⁷

VI. CONCLUSION

Due to the increasing transformation of kitchens into science labs, it is imperative that chefs be afforded patent protections for their innovative cooking techniques and food inventions. By allowing patent protections in the culinary industry, chefs will be further impelled to create new food-related inventions. Chefs in the era of postmodern cuisine and molecular gastronomy are no different than scientists in laboratories inventing new and useful products for society, and thus should be awarded for their time and creative efforts. Patent protection improves the culinary industry by bringing new creations to the table. Additionally, because a chef can grant licenses for the use of her patented creation, patents provide for another source of revenue for the chef along with popularity for a restaurant.

instances offers alternative protective umbrellas for patentable technology and, in others, may together serve to protect subject matter that is the same or closely related to patented matter.").

^{173.} See supra Part IV.A.

^{174.} See generally Kewanee Oil Co., 416 U.S. at 470 (holding that trade secret protection in the absence of patent protection is consistent with the policy of encouraging invention and will have a beneficial effect on society).

^{175.} Michael Klein, *Endangered Species and Trade Secrets*, 28 ABA NATURAL RES. & ENV'T 53 (Winter 2014) ("You really cannot be 100 percent certain you have a trade secret until [in the event of litigation] a court rules that you have one.").

^{176.} Id.

^{177.} Id. See also Dean W. Russell et al., Choosing Between Trade Secret and Patent Protection, in INTELL. PROP. DESK REFERENCE 215, 220–21 (Kilpatrick Stockton 2006), available at https://clients.kilpatricktownsend.com/IP DeskReference/Documents/Trade%20Secret%20or%20Patent%20Protection.pdf (warning of the following scenario: "Suppose, for example, that Company A develops a clearly patentable chemical process, yet because the process is not easily reverse engineered from the resulting product, Company A opts for trade secret protection of the process, Assume several years later, after Company A has been selling the chemical products produced from the secret process, Competitor Z independently develops the process and applies for a United States patent. Under United States patent law, Competitor Z could obtain such a patent") (footnotes omitted).

A Chef's Guide to Patent Protections

Although copyright protection would be improper for food recipes and techniques due to its lengthy duration of protection, patents afford the appropriate protection for a short period of time: twenty years.¹⁷⁸ In some circumstances trade secret protection may also be appropriate. However, because trade secrets do not prevent individuals or companies from reverse engineering, patent protections are more appropriate in certain circumstances. Affording patent protections to creative food techniques and recipes will not hurt the culinary industry, but rather will benefit and improve it.

^{178.} Patents for Inventors, supra note 33.

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