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Seafood Marketing: Combating Fraud and Deception

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Seafood Marketing: Combating Fraud and Deception

Summary

Media attention has focused on recent incidents of economic fraud relating to seafood. The flesh of many fish species is similar in taste and texture and, therefore, it is difficult to identify species from fillets, especially after preparation for consumption. Thus, it is relatively easy to substitute an inexpensive species for one of higher value. Inaccurate (low) counts or net weights ("short weighting") result in consumers receiving less for their money than advertised and anticipated. Overbreading may cause consumers to pay shrimp prices for excess bread crumbs. Excessive amounts of glaze (overglazing) can deliberately be used to increase the apparent weight, and therefore the apparent value, of the delivered product. In addition, some new treatment procedures by the seafood industry are being questioned for their potential to deceive consumers.

The extent of this fraud is not well documented and, in some cases, may not be intentional. The National Fisheries Institute (NFI) has undertaken an initiative to promote economic integrity within the seafood industry, concentrating on three primary areas:

- transshipment of products subject to antidumping and countervailing duties;
- mislabeling of products or species substitution; and
- mislabeling of weights or counts of products.

The Food and Drug Administration (FDA) is the primary agency responsible for ensuring that food sold in interstate commerce is properly labeled. FDA's jurisdiction covers seafood and the agency operates an oversight compliance program, the Seafood Regulatory Program, for fishery products. Responsibility for a food product's safety, wholesomeness, identity, and economic integrity rests with the processor or importer, who must comply with regulations promulgated under the Federal Food, Drug and Cosmetic Act (FFDCA) and the Fair Packaging and Labeling Act (FPLA).

This report reviews recent incidents of fraud and deception and examines several policy issues. Congress may become involved in oversight of how federal agencies are addressing these issues, and legislation related to these concerns may be considered.

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Media attention has focused on recent incidents of fraud relating to seafood — restaurants serving lower-priced fish than identified on menus, lower-priced species marketed commercially as higher-priced species, packaged weights of seafood less than labeled weights, and extra water added to seafood to increase total product weight — raising public concern. In some instances, such fraud may not be intentional and its extent is not well documented. These occurrences cheat consumers and have the potential to erode consumer confidence in seafood generally. Such reduced confidence could limit Americans' consumption of seafood at a time when public health officials are encouraging people to eat more seafood. Congress is facing questions of whether the law applicable to fraudulent seafood sales and marketing is clear and enforceable, whether agency enforcement efforts targeting seafood fraud are adequate, and whether the penalties for seafood fraud are a deterrent.

Fraudulent or Deceptive Practices

Mislabeling or Substituting Species. The flesh of many fish species is similar in taste and texture and, therefore, it is difficult to identify species from fillets, especially after preparation for consumption. Thus, it is relatively easy to substitute an inexpensive species for one of higher value. Over the nine-year period of FY1988-FY1997, routine examinations of seafood products by the National Marine Fisheries Service's National Seafood Inspection Laboratory found that 37% of fish and 13% of other seafood (e.g., shellfish, edible seaweed) from randomly selected vendors were mislabeled.[1] The primary federal law that addresses mislabeling is the Federal Food, Drug, and Cosmetic Act of 1938 (FFDCA; 21 U.S.C. §§ 301 et seq.), which is administered by the Food and Drug Administration (FDA).

This fraud can be perpetuated several different ways. Unfair and deceptive trade practices occur when restaurants misrepresent menu items to their patrons by substituting other (often less desirable and inexpensive) fish for an item described as a higher-valued species. This fraud also occurs at the manufacturing level, as in American Samoa, where a dozen tuna cannery workers were accused of falsely labeling cans as tuna when the cans were actually filled with less expensive wahoo, and selling it to local stores.[2] Some distributors appear to have knowingly sold restaurants and retailers lower-valued species, claiming them to be of higher value.

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[1] See [http://sst.ifas.ufl.edu/22ndAnn/file08.pdf].

[2] "Chicken of the Sea Embroiled in Labeling Scam," Associated Press (March 21, 2007).

In addition, food service entities can be victimized, if they pay several times what they should due to bait-and-switch tactics of unscrupulous vendors. Legitimate suppliers lose an equivalent amount of business to competitors who undercut them by quoting one item and replacing the higher-valued species with a less-expensive one.

In February 2007, WKRG-TV (Mobile, AL), using DNA testing, found that only one in ten samples advertised as grouper actually were this fish, prompting state agriculture inspectors to target 35 Gulf of Mexico restaurants and seafood markets for sampling.[3] Alabama state law makes a restaurant or distributor subject to a fine of $5,000 per offense for selling falsely labeled seafood products. In a similar media investigative report, 17 of 24 Tampa, FL, area restaurants were selling less-desirable species as grouper.[4] These media investigations have not been limited to the Gulf area.[5] These problems can arise from substitution at the restaurant level, misrepresentation by the restaurant supplier, or product misidentification anywhere earlier in the harvesting/processing process. It is often difficult to determine who is at fault, especially if there is collusion. However, some of the databases the media have used for this testing are not verified for accuracy, and there is debate within the seafood scientific laboratory testing community about the accuracy of some of these media reports.

Other instances of mislabeling include imported farmed salmon being falsely identified as wild Alaska salmon and frozen seafood being marketed as fresh product, as well as confusion over seafood being marketed as "organic." Since large quantities of seafood are imported for U.S. consumption, some portion of the mislabeling problem undoubtedly originates with foreign suppliers. To address this concern, FDA has issued an import alert on species substitution, providing guidance to agency field personnel regarding the manufacturers and/or products at issue.[6] **Table 1** provides a list of some commonly substituted species.[7] The problem of species substitution not only occurs intentionally with certain species and products because of their differing values, but also is pervasive unintentionally for species with easily mistaken substitutes.

An additional concern is the correct use of names to identify seafood. Because different species may be called by the same vernacular name and because the same species may have different vernacular names in different regions, standard market

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[3] See [http://www.wkrg.com/servlet/Satellite?pagename=WKRG%2FMGArticle%2FKRG_BasicArticle&c=MGArticle&cid=1149193401779&path=%21news%21local].

[4] See [http://pqasb.pqarchiver.com/sptimes/access/1230334761.html?dids=1230334761:1230334761&FMT=FT&FMTS=ABS:FT&date=Mar+10%2C+2007&author=CURTIS+KRUEGER&pub=St.+Petersburg+Times&edition=&startpage=1.A&desc=%27Grouper%27+costs+restaurants].

[5] Others have been reported in Portland, OR, [http://www.kptv.com/print/11072970/detail.html]; and in Phoenix, AZ, [http://www.kpho.com/print/10371007/detail.html], for example.

[6] For FDA import alert #16-04, see [http://www.fda.gov/ora/fiars/ora_import_ia1604.html].

[7] Modified from [http://www.cfsan.fda.gov/~frf/econ.html].

names for seafood products are necessary to avoid confusion. FDA and the National Marine Fisheries Service (NMFS) have cooperated to develop "The Seafood List," compiling existing acceptable market names for imported and domestically available seafood.[8] A common or usual name[9] is the "prevalent and meaningful name by which consumers ordinarily identify the food"[10] and is appropriate if the name of the fish complies in other respects with § 403 of the FFDCA and with the general principles set forth in 21 C.F.R. § 102.5. Use of either the acceptable market name or the common name in labeling seafood products assures that identity labeling of the seafood will comply with FDA and NMFS regulations. FDA discourages the use of vernacular names as this practice may cause seafood to be misbranded.

Table 1. Examples of Commonly Substituted Seafood

(less expensive products are in column B)

A	B
Red Snapper	Rockfish
Mahi Mahi	Yellowtail (*Seriola lalandi*)
Swordfish	Mako Shark
Orange Roughy	Oreo Dory or John Dory
Cod	Alaska Pollock
Halibut	Sea Bass
Dover Sole	Arrowtooth Flounder
Red Drum	Black Drum
Snapper (*Lutjanus* sp.)	Tilapia
Grouper	Basa or tra
Lake or Yellow Perch	White Perch or Zander
Caviar (Sturgeon species)	Paddlefish or other fish roe
Walleye	Sauger or Alaska Pollock
Chum Salmon	Pink Salmon
Salmon	Steelhead Trout
Pacific salmon	Atlantic salmon
Blue Crabmeat	Imported Crabmeat
Wild-Caught Salmon	Farm-Raised Salmon

An example of this concern arose several years ago when increasing imports of basa (*Pangasius bocourti*) from Vietnam were marketed in the United States as "catfish," causing confusion with domestically produced *Ictalurid* catfish. Prior FDA guidance listed a number of fish other than those from the family *Ictaluridae* with the

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[8] See [http://www.cfsan.fda.gov/~frf/seaintro.html].

[9] Common names of fish species have been standardized, often by professional societies. For example, see American Fisheries Society, *Common and Scientific Names of Fishes from the United States, Canada, and Mexico*, Special Publication 29, 6th edition (Bethesda, MD: July 2004), 386 p.; and American Fisheries Society, *World Fishes Important to North Americans*, Special Publication 21 (Bethesda, MD: 1991), 243 p.

[10] 63 *Fed. Reg*. 20,148 (April 23, 1998).

term "catfish" in their names. This prior guidance reflected what FDA believed were names for seafood that could be used by importers and domestic distributors and sellers consistent with the food naming provisions of the FDCA. To address this confusion, § 10806 of P.L. 107-171 (Farm Security and Rural Investment Act of 2002) amended § 403 (the food misbranding provision) of the FFDCA (21 U.S.C. § 343) to provide that a food shall be deemed to be misbranded "[i]f it purports to be or is represented as catfish, unless it is fish classified within the family *Ictaluridae*." A current concern relates to the use of "lobster" in describing items generally identified as "langostinos."[11]

Another concern is mislabeling of the country of origin. Importers may falsely claim their seafood product is from, for example, Norway, because Norwegian seafood products may be recognized as of high quality. In October 2004, the Agricultural Marketing Service (AMS) promulgated an interim final rule requiring certain retailers and their suppliers to notify customers of the country of origin of wild and farm-raised fish and shellfish.[12] AMS reopened this rule for additional comment in June 2007.[13] Without labeling, consumers would rarely be able to distinguish a product's country of origin; labeling fish falsely as to country of origin removes the cachet from more-desirable products, driving down the more desirable products' market price. Some have pointed to the advantages of a complete traceability program for seafood from producer to the customer so that the source of and liability for any mislabeling can be more easily identified.

Low Weights or Undercounting. Inaccurate (low) counts or net weights ("short weighting") result in consumers receiving less for their money than advertised and anticipated. These instances, although commonly reported, also constitute mislabeling offenses under the FFDCA. The seafood community feels this to be a much greater problem than species substitution, costing legitimate businesses sales and reduced confidence in their true-packaged products.

Over-Treating or Added Water Weight. Overbreading may cause consumers to pay shrimp prices for excess bread crumbs. The FDA standard for breaded shrimp requires that such a product contain at least 50% shrimp. Frozen fillets, shrimp, crab legs, and other products are normally protected from dehydration (freezer burn) while frozen by the application of a light glaze of ice; a packer then includes more product in the package to compensate for the weight of the glaze. Excessive amounts of glaze (overglazing) not compensated for in this manner can deliberately be used to increase the apparent weight, and therefore the apparent value, of the delivered product.

Sodium tripolyphosphate (STP) is a legitimate means for aiding production, when used properly. However, STP can be misused to retain excess moisture in seafood products. Prolonged soaking of seafood in an STP-water solution can result, for example, in Atlantic sea scallops or shrimp with excessive water. Such excess water adds to the product's total weight, resulting in economic fraud when seafood prices are charged for water and, in the case of shrimp, the product is bumped into a larger weight

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[11] See [http://www.lawfuel.com/show-release.asp?ID=3593].

[12] 69 *Fed. Reg*. 59708-59750 (October 5, 2004).

[13] 72 *Fed. Reg*. 33851 (June 20, 2007).

class where a higher price per pound can be charged. Seafood treated with STP or other water-retaining chemicals must be accurately labeled to identify this treatment. FDA has set percent-moisture guidelines and labeling requirements for treated scallops, but no moisture guidelines or standards exist for shrimp.

Altered Color. Fish fillets can be treated with carbon monoxide (CO) to give fish flesh a fresher-appearing reddish tint.[14] The growing use of CO (also referred to as "tasteless smoke" or TS) as a "pigment fixative" has alarmed some consumer advocates who say it deceives shoppers who depend on color to help them avoid spoiled fish. An additional consumer safety issue occurs when the flesh of certain species such as tuna develops toxic levels of histamine through time and/or temperature abuse — with CO treatment there are no visual cues to indicate when such flesh may be decomposed and toxic. Consumer advocates have urged FDA to conduct a formal evaluation of this treatment's impact on consumer safety. FDA considers tuna to be misbranded if it is treated with TS/CO but not labeled to indicate that it contains a preservative, and thus purports to be unprocessed, fresh, or fresh-frozen tuna.[15] All processed seafood involving CO/TS requires label declarations under 21 C.F.R. part 101.

Some aquaculture operations use the color additives canthaxanthin and/or astaxanthin in feed to impart a more orange color to fish flesh of salmon and/or trout. The flesh of the farmed varieties of these fish would, if not for these color additives, be a less-appealing paler white. Use of these additives is legal as long as fish are properly labeled to identify that this treatment has been used. However, farmed salmon and trout, where these additives have been used to enhance color, have been deceptively and fraudulently sold as "wild" fish.

Transshipment to Avoid Import or Customs Duties. Transshipment occurs when foreign producers ship goods to a second country en route to the United States. Although transshipment is generally legal and commonly used in the ordinary course of business, it is illegal if it is done for the purpose of circumventing duties and other applicable trade restrictions. It has been reported that shrimp from China have been shipped to the United States by way of Indonesia to avoid paying antidumping duties of 112% levied by the United States on shrimp imported from China, but not on shrimp imported from Indonesia.[16]

Industry Initiatives

On October 13, 2006, concerns that seafood fraud had begun to and could increasingly erode consumer confidence in seafood led the National Fisheries Institute (NFI) to announce an initiative to promote economic integrity within the seafood

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[14] See [http://www.sushiman.net/ahi/carbon_monoxide_trea.htm].

[15] See FDA Import Bulletin #16B-95, available at [http://seafood.ucdavis.edu/Guidelines/fdabulletin16b.htm].

[16] See [http://www.atimes.com/atimes/Southeast_Asia/HC22Ae01.html]. Further information is contained in out-of-print CRS Report RS21776, *Shrimp Trade Dispute: Chronology*, by Eugene H. Buck, available from the author.

industry.[17] Implementation of this initiative is scheduled for summer 2007, concentrating on three primary areas:

- transshipment of products subject to antidumping and countervailing duties;
- mislabeling of products or species substitution; and
- mislabeling of weights or counts of products.

NFI intends to pursue this initiative (1) by obtaining commitments from the CEOs of NFI member companies to comply with current law and regulation and (2) by developing an accountability system that would reward "good actors" and identify "bad actors." Such an accountability system would involve screening by a Better Seafood Bureau, independent third-party audits of processes and products, and a member review process. NFI officially launched the Better Seafood Bureau on July 5, 2007.

Applicable Law[18]

With the increasing media attention to this issue, Congress may face questions concerning current law applicable to seafood marketing and fraud. The issues to consider include whether current law applicable to fraudulent seafood sales and marketing is clear and enforceable; whether federal agency enforcement efforts targeting seafood fraud are adequate; whether the penalties for seafood fraud offenses are a deterrent; and whether the resources for federal agency enforcement are sufficient.

FDA is the primary agency responsible for ensuring that food sold in interstate commerce is properly labeled. FDA's jurisdiction covers seafood and the agency operates an oversight compliance program, the Seafood Regulatory Program, for fishery products. Responsibility for a food product's safety, wholesomeness, identity, and economic integrity rests with the processor or importer, who must comply with regulations promulgated under the Federal Food, Drug and Cosmetic Act (FFDCA) and the Fair Packaging and Labeling Act (FPLA). FDA has the authority to detain or temporarily hold food being imported into the United States while it determines if the product is misbranded or adulterated. FDA also has the authority to take legal action against sellers of adulterated and misbranded seafood and to recommend criminal prosecution or injunction of responsible firms and individuals. However, enforcement of economic fraud and labeling laws has taken a backseat to protecting the health and safety of the U.S. food supply.[19] The appropriate level of funding may also be an issue, providing adequate resources so that FDA can more systematically monitor the situation, better determine the scope and scale of this type of problem, and develop new programs that address this fraud. About 85 of FDA's roughly 1,350 inspectors work primarily with seafood.

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[17] See [http://www.aboutseafood.com/assets/files/nfi_annrpt06d2.pdf].

[18] Material in this section was contributed by Stephanie Showalter, Director, National Sea Grant Law Center, University of Mississippi, University, MS, May 22, 2007.

[19] "Species Substitution: Labeling Law Not An FDA Priority...," *Santa Monica Seafood SeaLog* (April 2006).

Federal Food, Drug, and Cosmetic Act. The FFDCA attempts to keep interstate commerce free from misbranded (i.e., mislabeled) articles and to protect the public from inferior foods resembling standard products but marketed under distinctive names.[20] The governing statute for naming food is the FFDCA. The FFDCA, as amended, gives FDA authority over most food regulation and includes:

- a series of definitions elaborating on the concepts of adulteration and misbranding;
- control over all labeling of foods traveling in interstate commerce;
- detailed regulation of issues concerned with safety and wholesomeness of foods; and
- enforcement remedies available to the agency, when needed.[21]

An article is deemed misbranded if, among other things, its labeling is false or misleading or it is offered for sale under the name of another food.[22] An article is considered mislabeled when the label makes "no representation as to definition and standard of quality," unless the label bears the common or usual name of the food, if there is one.[23]

FDA has issued regulations that outline general principles for common or usual names of food. The common or usual name must

> accurately identify or describe, in as simple and direct terms as possible, the basic nature of the food or its characterizing properties or ingredients. The name shall be uniform among all identical or similar products and may not be confusingly similar to the name of any other food that is not reasonably encompassed within the same name. Each class or subclass of food shall be given its own common or usual name that states, in clear terms, what it is in a way that distinguishes it from different foods.[24]

A common or usual name of a food may be established by common usage or by regulation.[25] For example, FDA promulgated a regulation establishing that Pacific whiting or North Pacific whiting is the common or usual name of the food fish *Merluccius productus*.[26] Most common or usual names, however, are established through common usage.

In 1988, FDA published the FDA Guide to Acceptable Market Names for Food Fish Sold in Interstate Commerce ("The Fish List") to provide an authoritative source

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[20] 35A Am. Jur. 2d Food § 25 (2006).

[21] For more information, see CRS Report RL33559, *Food Safety: National Uniformity for Food Act*, by Donna V. Porter.

[22] 21 U.S.C. § 343. FDA further regulates this area of "Misbranding" in 21 C.F.R. § 101.18.

[23] 21 U.S.C. § 343(i)(1).

[24] 21 C.F.R. § 102.5(a).

[25] 21 C.F.R. § 102.5(d).

[26] 21 C.F.R. § 102.46.

of common names to establish order in the marketplace and reduce confusion among consumers. In 1993, FDA published an updated, expanded "Seafood List," which includes invertebrate species (mollusks and crustaceans) as well as finfish. The frequently updated Seafood List reflects what FDA considers the most appropriate market names for the identification and labeling of seafood and is the agency's primary guidance for naming seafood sold in interstate commerce.

Although the Seafood List includes "vernacular" names for some species, use of vernacular names is discouraged by FDA. The use of a vernacular name may cause a seafood to be misbranded under the FFDCA.[27] For example, FDA has issued specific guidance on using "red snapper" as a market name. FDA's policy states that "the labeling or sale of any fish other than *Lutjanus campechanus* as red snapper constitutes a misbranding in violation of the [FFDCA]."[28]

Under the FFDCA, species substitution also violates FDA's prohibition against adulteration. A food is deemed adulterated "if any substance has been substituted wholly or in part therefore."[29] The marketing of a less valuable fish as one of higher value is a substitution and can result in a finding of adulteration.

Fair Packaging and Labeling Act. The FPLA requires that consumers of packaged commodities be provided with accurate information as to its contents. Congress passed the FPLA to "enable consumers to obtain accurate information as to the quantity of the contents and should facilitate value comparisons."[30] Under the FPLA it is unlawful for persons engaged in labeling or packaging of consumer commodities "to distribute or to cause to be distributed in commerce any such commodity if such commodity is contained in a package, or if there is affixed to that commodity a label, which does not conform to the provisions" of the FPLA.[31]

The FPLA requires each label to identify the commodity and the name of its manufacturer, packer, or distributor and the net quantity of contents, in terms of weight or mass, measure, or numerical count.[32] Food products, falling within the scope of the FFDCA, introduced into interstate commerce in violation of the FPLA and its regulations are deemed to be misbranded within the meaning of the FFDCA.[33]

State Regulation of Seafood Labeling. In addition to the federal requirements, several states also regulate the labeling and branding of seafood under state versions of the FFDCA. For example, in Alaska "no person may label or offer for sale any food fish product designated as halibut, with or without additional descriptive

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[27] Sec. 540.750 Common or Usual Names for Seafood in Interstate Commerce (CPG 7108.26).

[28] Sec. 540.475 Snapper — Labeling (CPG 7108.21).

[29] 21 U.S.C. § 342 (b)(2).

[30] 15 U.S.C. § 1451.

[31] 15 U.S.C. § 1452.

[32] 15 U.S.C. § 1453(a).

[33] 15 U.S.C. § 1456(a).

words, unless the food fish product is *Hippoglossus* or *Hippoglossus Stenolepsis*."[34] In California, an individual who sells any commodity in less quantity than what is represented is guilty of a misdemeanor offense.[35]

Customs and Border Protection. Transshipment to avoid paying import or customs duties is illegal whenever it circumvents trade laws and other applicable trade restrictions.[36] The applicable law and regulation may vary, depending upon the trade agreement existing between the United States and another nation as well as the status of any antidumping and countervailing duties currently in force for particular products imported from designated nations.

Conclusions

Markets function efficiently when information is available to both consumers and producers. When seafood is mislabeled, consumers, retail stores, restaurants, and seafood producers will incur economic effects. The consumer may find the product less appealing because the mislabeled substitute is of lesser quality. Even if the product is of acceptable quality, news reports of fraud may detract from the consumer's satisfaction with seafood. Both factors may influence future consumer choices.

If consumers are unsatisfied, seafood businesses including retail stores, restaurants, processors, and fishermen, may lose future business. In general, the seafood industry may lose business if unhappy consumers substitute other products, such as beef, poultry, and pork. In some cases consumers may avoid the species in question, such as grouper. If consumer confidence in specific species is lost, prices may decrease because consumers switch to their next best alternative. Producers who would be likely to lose the most are those who specialize in that product. In general, both consumers and most producers would incur economic losses in cases of fraud, with short-term gains to those who sell mislabeled merchandise. There might be certain advantages from establishing a complete traceability program for seafood from harvester to consumer so that the source of and liability for any mislabeling could be more easily identified.

Although it is not clear whether the amount of fraud and deception in seafood sales and marketing is increasing, media attention to this issue has raised its profile with the public. The economic integrity initiative of the National Fisheries Institute has the potential to increase attention within the seafood industry to this issue as well as to address eroding consumer confidence in fair marketing of seafood produce. In response to increased public concern, Congress is facing questions concerning current law applicable to seafood marketing and fraud. These questions include whether current law applicable to fraudulent seafood sales and marketing is clear and enforceable, whether federal agency enforcement efforts targeting seafood fraud are adequate, and whether the penalties for seafood fraud offenses are a deterrent. In addition, increased funding may be an issue so that agencies can more systematically monitor the situation, better determine the scope and scale of this type of problem, and develop new programs that address this fraud.

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[34] Alaska Stat. § 17.20.045.

[35] Cal Bus & Prof Code § 12024.

[36] Section 592 of the Tariff Act of 1930 (19 U.S.C. § 1592).