

# FDA THEFT OF FOODQUESTTQ INTELLECTUAL PROPERTY

FOODQUESTTQ LLC

July 23, 2013

# TWENTY PATENT CLAIMS REDUCED TO PRACTICE FOR FOOD AND AGRICULTURE

Complexity Systems Management Method, Patent No.: US 8,103,601 B2					
Projectioneering LLC Patent Claims		Patent Claims as Reduced to Practice for Food and Agriculture by FoodQuestTQ		Trade Secret for Food	Business Confidential
1. A method of assessing and managing behavior of a complex adaptive system, comprising the steps of:	A. Inputting a first plurality of data defining parameters of said complex adaptive system;	1. Manage and assess the performance of the food life cycle across supply chain:	A. Determine the rules of operation for the different segments of the food supply chain, i.e., what they do and how they operate;	No	Yes
	B. Defining a plurality of fundamental events which determine behavior of said complex adaptive system;		B. Gather, study and group into categories past food safety, food defense and site safety and security events as they affect different segments of the food supply chain;	Yes	Yes
	C. Modifying at each of a plurality of times at least one of said first plurality of data to define a plurality of initial conditions;		C. Identify the operational conditions, i.e., the environment in which the different segments of the food supply operate;	Yes	Yes
	D. Testing each of said first plurality of data to determine a first subset of said first plurality of data which are most relevant to said plurality of fundamental events for each of said plurality of initial conditions in order to develop a plurality of scenarios of behavior of said complex adaptive system, and;		D. Develop scenarios of past and imagined events affecting different segments of the food supply chain, and;	No	Yes
	E. Measuring an effect of each one of said plurality of initial conditions of each respective one of said developed plurality of scenarios on said first subset of data to provide status information which is capable of being tested to indicate likelihood of an event occurring in said complex adaptive system.		E. Use the scenarios to determine the combinations of rules and operational conditions that indicate when, where and how likely an adverse event will occur.	Yes	Yes

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2. The method of claim 1 further including the steps of:	A. Testing each of said scenarios to determine for each scenario precise events which must occur to cause said complex adaptive system to exhibit said scenario; and determining for each tested scenario critical decision points.	2. The method of claim 1 further including the steps of:	A. Reverse engineer scenarios of past and imagined events to develop event paths that cause different events; determine where, when and why human interventions are required to prevent and mitigate adverse outcomes.	Yes	Yes
3. The method according to claim 1 including the further step of applying to said status information a first algorithm providing an estimate of an event sequence interruption.		3. Apply the CSM systems approach, i.e., deterrence, detection, communication, response time, response quality, consequence and mitigation to determine strengths and weaknesses using scenarios.		Yes	Yes
4. The method according to claim 3 wherein values obtained from said applying of said first algorithm provide an event quotient for each of said first subset of data.		4. Apply values for deterrence, detection, communication, response time, response quality, consequence and mitigation.		Yes	Yes
5. The method according to claim 3 further including the step of modifying said first plurality of data as a function of a result of said application of said first algorithm.		5. Input additional data to identify weaknesses and introduce risk reduction countermeasures when, where and how they are required.		Yes	Yes
6. The method according to claim 4 wherein said event quotient further includes a functional relationship based on an algorithm related to occurrence of natural events and an effect of said natural events on said first subset of data.		6. Determine the likelihood of weather and geologic events affecting/effecting agriculture and food facilities for the different segments along the food supply chain in different regions.		Yes	Yes
7. The method of claim 1 wherein said first subset of data are critical nodes of the complex adaptive system.		7. Determine the most important factors, i.e., critical nodes, that affect/effect the outcome of different scenarios.		Yes	Yes

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8. The method of claim 2 further including the steps of:	A. Modifying said first plurality of data to simulate predetermined events occurring in said complex adaptive system;	8. The method of claim 2 further including the steps of:	A. Develop simulated scenarios that produce predetermined outcomes; determine the affects/effects on where, when and why human interventions are required to prevent and mitigate adverse outcomes, i.e., critical decisions points; use decision/fault trees and other means to visualize the scenario, the sequence of events and the critical decision points.	Yes	Yes
	B. Determining the effects from said simulated events on said critical decision points; and forming decision fault trees from said determined effects.				
9. The method of claim 8 further including forming decision maps and computer models to manage said predetermined events.		9. Create decision maps and computer models to manage predetermined events.		Yes	Yes
10. A method of increasing the likelihood of behavior of a complex adaptive system, comprising the steps:	A. Defining fundamental elements which control the functioning of the complex adaptive system;	10. Preventing and improving responses to food safety, food defense and food site safety and security events by:	A. Defining the rules of operation for the different segments of the food supply chain across the food life cycle, i.e., what they do, when they do it and how they operate.	No	Yes
	B. Assigning a plurality of sets of initial values at a respective plurality of times to a plurality of features of the complex adaptive system;		B. Assigning baseline values for the probability of different events occurring; how vulnerable the activity is to different food safety, food defense and site safety and security events; the consequences associated with different types of events, and; for deterrence, detection, communication, response time, response quality, consequence and mitigation.	Yes	Yes
	C. Determining which ones of said plurality of features of the complex adaptive system are most directly related to said fundamental elements for each of said plurality of sets of initial conditions in order to develop a plurality of scenarios of behavior of said complex adaptive system, and;		C. Determining which of the features in b., above, are most directly related to the rules of operation, i.e. fundamental elements, and the environment, i.e., operational conditions, and develop scenarios.	Yes	Yes
	D. Measuring an effect of each one of said plurality of sets of initial conditions of each respective one of said developed plurality of scenarios on said ones of said plurality of features most directly related to said fundamental elements to generate sets of data functionally related to the likelihood of a particular occurrence in said complex adaptive system.		D. Measure the affect/effect of fundamental elements and operational conditions and generate scenarios to produce outcomes.	Yes	Yes

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11. The method of claim 10 further including the steps of:	A. Testing each of said scenarios to determine for each scenario precise events which must occur to cause said complex adaptive system to exhibit said scenario, and:	11. The method of claim 10 further including the steps of:	A. Reverse engineer test scenarios and develop event paths that cause different events; determine where, when and why human interventions are required to prevent and mitigate adverse outcomes.	Yes	Yes
	B. Determining for each tested scenario critical decision points.				
12. The method according to claim 10 including the further step of applying to said set of data a first algorithm providing an estimate of an event sequence interruption.		12. Apply CSM Method system process model where the interdiction of an event, i.e., prevention, is a function of deterrence, detection, communication, prevention, response time, response quality to produce an estimate of event sequence interruption.		Yes	Yes
13. The method according to claim 12 wherein values obtained from said applying of said first algorithm provide an event quotient for each of said ones of said plurality of features most directly related to said fundamental elements.		13. Apply values to deterrence, detection, communication, prevention, response time, response quality to produce an event quotient, i.e. event quotient.		Yes	Yes
14. The method according to claim 11 further including the step of modifying said plurality of features as a function of a result of said application of said first algorithm.		14. Modify assigned values through the introduction of risk reduction measures that achieve the interdiction of an event, i.e., prevention.		Yes	Yes
15. The method according to claim 13 wherein said event quotient further includes a functional relationship based on an algorithm related to occurrence of natural events and an effect of said natural events on said ones of said plurality of features most directly related to said fundamental elements.		15. Apply a natural hazards vulnerability ranking based on the probability of weather and geologic events occurring in a region, the consequences should such an event occur, i.e., weather and geologic events ranking, and the actions taken to mitigate the potential consequences, i.e., adjusted event quotient.		Yes	Yes

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16. The method of claim 11 further including the steps of:	A. Modifying said plurality of features to simulate predetermined events occurring in said complex adaptive system;	16. The method of claim 11 further including the steps of:	A. Determine the affects/effects of predetermined event paths for scenarios resulting in different events; determine the affects/effects of different event paths on where, when and why human interventions are required to prevent and mitigate adverse outcomes, i.e., critical decision points, and; use decision/fault trees and other means to visualize the scenario, the sequence of events, and the critical decision points.	Yes	Yes
	B. Determining the effects from said simulated events on said critical decision points; and forming decision fault trees from said determined effects.				
17. The method of claim 16 further including forming decision maps and computer models to manage said predetermined events.		17. Create decision maps and computer models to manage predetermined events.		Yes	Yes

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## Complexity Systems Management Method, Patent No.: US 8,103,601 B2

Projectioneering LLC Patent Claims		Patent Claims as Reduced to Practice for Food and Agriculture by FoodQuestTQ		Trade Secret for Food	Business Confidential
18. A computer program product for use with a digital computer for assessing and managing behavior of a complex adaptive system, said computer program product including a computer usable medium having a plurality of computer readable program code means embodied in said medium, comprising:	A. A first computer readable program code means containing a first plurality of data defining parameters of said complex adaptive system and a plurality of defined relationships which control the functions of the complex adaptive system;	18. The Food ProtectionTQ suite of automated computer software tools with computer readable codes that apply CSM Method process model comprising:  <ul style="list-style-type: none"> <li>• Food Defense Architect;</li> <li>• Food DefenseTQ;</li> <li>• Food Safety Architect;</li> <li>• Food SafetyTQ;</li> <li>• Food Mapper;</li> <li>• Food Event Analysis and Simulation Tool (FEAST), and;</li> <li>• Food Response Emergency Evaluation Tool (FREE).</li> </ul>	A. A computer readable program code containing data defining the rules and operational conditions of food defense, food safety and food site safety and security and the defined relationships which control the occurrence, prevention and mitigation of different events;	Yes	Yes
	B. A second computer readable program code means causing a modification at each of a plurality of times at least ones of said first plurality of data to define a plurality of initial conditions;		B. A computer readable program code that can adjust the rules, fundamental elements, for food defense, food safety and food site safety as operational conditions change;	Yes	Yes
	C. A third computer readable program code means for testing each of said plurality of data to determine a first subset of said first plurality of data which are most relevant to said plurality of defined relationships for each of said plurality of initial conditions in order to develop a plurality of scenarios of behavior of said complex adaptive system, and;		C. A computer readable program code to determine which rules and operational conditions are most significant in producing outcomes in scenarios, and;	Yes	Yes
	D. A fourth computer readable program code means for determining an effect of each one of said plurality of initial conditions of each respective one of said developed plurality of scenarios on said first subset of data to provide status information which is capable of being tested to indicate likelihood of an event occurring in said complex adaptive system.		D. A computer readable program code for determining the affect/effect operational food defense, food safety and food site safety and security conditions that provide status information that can be tested to indicate the likelihood, i.e., probability, of an event occurring.	Yes	Yes



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19. The computer program product according to Claim 18 including a fifth computer readable code means for testing each of said scenarios to determine for each scenario precise events which must occur to cause said complex adaptive system to exhibit said scenario; and determining for each tested scenario critical decision points.	19. A computer readable code for testing scenarios to determine the precise events, i.e., event paths, which must occur to cause different food defense, food safety and food defense and site safety and security scenarios and determine where, when and why human interventions are required to prevent and mitigate adverse outcomes, i.e., critical decisions points for each tested scenario.	Yes	Yes
20. The computer program product according to Claim 19 including a sixth computer readable code means for applying to said status information a first algorithm providing an estimate of an event sequence interruption.	20. A computer readable program code that applies the CSM Method system process model to the above data where the interdiction of an event, i.e., prevention, is a function of deterrence, detection, communication, prevention, response time, response quality to produce an estimate of event sequence interruption.	Yes	Yes



TABLE LEGEND	
TERM	EXPLANATION
<b>FQTQ Idea</b>	A FoodQuestTQ LLC protected idea as derived from reducing Projectioneering LLC patent , Complexity Systems Management Method, Patent No.: US 8,103,601 B2, to practice for food and agriculture. The patent is embodied under the registered trademarked name as the CSM METHOD®.
<b>Description</b>	The original protected idea as drawn from the Projectioneering LLC patent, Complexity Systems Management Method, Patent No.: US 8,103,601 B2, that was used by FoodQuestTQ LLC to reduce the patent to practice for food and agriculture.  Ideas developed to reduce the patent to practice were treated as either trade secret or business confidential information prior to their unauthorized publication by the Food and Drug Administration.
<b>Date Conceived</b>	The time that the idea was first documented as the subject of an invention.
<b>Patent</b>	Signifies that the protected idea emanates from the Projectioneering LLC patent, Complexity Systems Management Method, Patent No.: US 8,103,601 B2.
<b>OIP</b>	Acronym for “Other Intellectual Property”, i.e., “business confidential” information
<b>POISON</b>	The FoodQuestTQ metadata repository of accidental and intentional food poisonings, industrial accidents at food facilities, equipment malfunctions of food equipment and natural hazards events affecting food operations and including growers.
<b>Food DefenseTQ</b>	The FoodQuestTQ automated software tool that is used by food operators along the supply chain to build and monitor effective food defense plans by asking what specific mitigating strategies are in place.
<b>Food SafetyTQ</b>	The FoodQuestTQ automated software tool that is used by food operators along the supply chain to build and monitor effective food safety plans by asking what specific mitigating strategies are in place.
<b>Food Defense Architect</b>	A more sophisticated version of Food DefenseTQ used by food operators along the supply chain to build the most effective food defense plans while continuously monitoring their performance.
<b>Food Safety Architect</b>	A more sophisticated version of Food SafetyTQ used by food operators along the supply chain to build the most effective food safety plans while continuously monitoring their performance.
<b>Food Event Analysis and Simulation Tool (FEAST)</b>	The FoodQuestTQ software tool that is used to develop and analyze food safety and food defense scenarios to promote multidisciplinary problem solving in the identification and filling of food defense and food safety gaps.
<b>FREE</b>	The FoodQuestTQ software tool, i.e., Food Response and Emergency Evaluation (FREE) Tool that is used to develop and analyze food safety and food defense scenarios in order to develop optimum food emergency response plans.
<b>FPP</b>	The FDA Food Protection Plan that contains pre-existing elements of the Projectioneering LLC patent as embodied in the Projectioneering LLC registered trademarked CSM METHOD®.
<b>FDPB</b>	The FDA Food Defense Plan Builder that duplicates the pre-existing FoodQuestTQ Food DefenseTQ and Food Defense Architect tools.
<b>MSDB</b>	The FDA Food Defense Mitigation Strategies Database that duplicates the pre-existing FoodQuestTQ Food DefenseTQ and Food Defense Architect tools.
<b>iRISK</b>	The FDA iRISK tool that contains elements of the pre-existing Projectioneering LLC patent as embodied in the Projectioneering LLC registered trademarked CSM METHOD®.
<b>FREE-B</b>	The FDA Food Response Emergency Exercise-Bundled tool that duplicates of FoodQuestTQ LLC’s pre-existing FEAST and FREE tools.

# TWENTY SPECIFIC EXAMPLES OF FDA THEFT OF INTELLECTUAL PROPERTY FROM FOODQUESTTQ LLC

FQTQ Idea	Description	Date Conceived	Sources		FoodQuestTQ LLC Tool							What the FDA has Stolen	Used by FDA Without Permission in the Following FDA Imitation Products				
			Patent	OIP	POISON	FDTQ	FSTQ	FDAR	FSAR	FEAST	FREE		FPP	FDPB	MSDB	iRISK	FREE-B
1. Food Protection Systems Model	The CSM Method® defines the threat continuum elements of deterrence, detection, delay, communication, response time, response quality and mitigation.	Pre-2007	Yes	Yes								The FDA has stolen the threat continuum elements of prevention, interdiction, i.e., the FDA uses the substituted term of “intervention”; communication and response.					
2. Indicators and Warnings	The CSM Method® defines a methodology for identifying the indicators and warnings of impending food events.	Pre-2007	Yes	Yes								The FDA has stolen the method for identifying indicators and warnings of impending food events, i.e., the FDA uses the substituted term “signals”.					
3. Probability of Occurrence as a function of vulnerability and consequence	The CSM Method® defines the probability of a food incident occurring as the combination of how vulnerable you are and the consequences that would result from a food incident.	Pre-2007	Yes	Yes								The FDA has stolen the “probability of occurrence” method that is used to prioritize food system vulnerability and risk.					
4. Steps	The CSM Method® defines a methodology for determining food protection risks and the specific measures that must be implemented by food operations to mitigate risks and identify interventions; these are called “steps.”	Pre-2007	Yes	Yes								The FDA has stolen the “steps” method and associated taxonomy for identifying risks and implementing risk reduction measures; the FDA uses the substitute term of “mitigation strategies” for “steps.”					
5. Immersions	The CSM Method® method of “immersions” and “real” and “simulated events” are used to identify vulnerabilities, risk reduction measures, promote communication and achieve multidisciplinary problem solving.	Pre-2007	Yes	Yes								The FDA has stolen the method of “immersions”; the FDA uses the substitute terms “table top exercise” for “immersions”; “teachable moments” for “lessons learned”, and; “scenarios” for “simulated events.”					

# TWENTY SPECIFIC EXAMPLES OF FDA THEFT OF INTELLECTUAL PROPERTY FROM FOODQUESTTQ LLC

FQTQ Idea	Description	Date Conceived	Sources		FoodQuestTQ LLC Tool							What the FDA has Stolen	Used by FDA Without Permission in the Following FDA Imitation Products				
			Patent	OIP	POISON	FDTQ	FSTQ	FDAR	FSAR	FEAST	FREE		FPP	FDPB	MSDB	iRISK	FREE-B
6. Food Protection Hot Spots	The CSM Method® defines a method for identifying and prioritizing the importance of high risk areas at food operations and along the supply chain based on probability of occurrence.	Pre-2007	Yes	Yes								The FDA has stolen the method for identifying and prioritizing high risk areas in the food supply, along the food supply chain and in operating food facilities based on probability of occurrence; the FDA has substituted the term “high risk areas” for “hot spots.”					
7. Reverse engineering of past and simulated events	The CSM Method® defines a method whereby past and simulated food events are gathered, deconstructed and analyzed, i.e., “reverse engineering.”	Pre-2007	Yes	Yes								The FDA has stolen the method for gathering, deconstructing and analyzing past and simulated food events to determine their probability of occurrence, lessons learned and to identify mitigating strategies.					
8. Identification of High Risk Agents	The CSM Method® defines a method to identify high risk agents by gathering deconstructing and analyzing poisoning events.	Pre-2007	Yes	Yes								The FDA has stolen the method for gathering, deconstructing and analyzing, as complex systems, food incidents and related data to identify high risk agents.					
9. Actionable Knowledge	The CSM Method® defines a method to identify, gather and analyze information to produce actionable knowledge for risk mitigation.	Pre-2007	Yes	Yes								The FDA has stolen the methods for identifying types of information that should be collected and subjected to analysis in order to identify actionable intelligence to prevent food safety and food defense incidents.					
10. Cradle to grave	The CSM Method® is based on a holistic “cradle to grave” systems of systems view of the food supply from raw ingredients through human consumption, symptomology and health outcomes, i.e., the science-based view of the food supply as a complex adaptive system.	Pre-2007	Yes	Yes								The FDA has stolen the method of using the holistic “cradle to grave” systems of systems science-based view of the of the food supply, i.e., the FDA uses substitute terms such as “from field to fork” and “entire supply chain.”					

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			Patent	OIP	POISON	FDTQ	FSTQ	FDAR	FSAR	FEAST	FREE		FPP	FDPB	MSDB	iRISK	FREE-B
11. Risk Reduction Countermeasures	The CSM Method® defines the methods to determine risk and risk reduction measures based on the reverse engineering of past food incidents, the use of futures driven scenarios and the application of advanced science and information technology.	Pre-2007	Yes	Yes								The FDA has stolen the methods used to identify risks and their associated risk reduction measures. i.e., the FDA substitutes the term “mitigation strategies” for risk countermeasures.					
12. Food Risk Model	The CSM Method® defines a systems risk model that subsumes both food safety and food defense.	Pre-2007	Yes	Yes								The FDA has stolen the food protection systems model that subsumes both food safety and food defense.					
13. Perpetual Assessment	The CSM Method® ties continuous operational performance with perpetual assessment and inspection.	Pre-2007	Yes	Yes								The FDA has stolen the method for tying continuous operational performance with perpetual assessment and inspection, i.e., the FDA substitutes the term “inspectional strategies.”					
14. Best Investments	The Food CSM Method® defines methods for targeting the use of resources to obtain the greatest risk reduction value at the most reasonable cost.	Pre-2007	Yes	Yes								The FDA has stolen the methods to determine performance and “best investments” to mitigate risk, i.e., the FDA substitutes the term “mitigation strategies for “best investments.”					
15. Operational Tools	The CSM Method® defines methods for integrally tying the use of specific information technology applications to food industry operational requirements.	Pre-2007	Yes	Yes								The FDA has stolen methods for integrally tying the use of specific information technology applications to food industry operational requirements, i.e., the development of “operational tools” that rely on the application of information technology.					

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			Patent	OIP	POISON	FDTQ	FSTQ	FDAR	FSAR	FEAST	FREE		FPP	FDPB	MSDB	IRISK	FREE-B
16. Food Protection as a Science	The CSM Method® defines a systems model and methods for treating food protection as a science that relies on quantitative statistical methods for determining risk values.	Pre-2007	Yes	Yes								The FDA has stolen the model and methods for treating food protection as a science that relies on quantitative statistical methods for determining risk values.					
17. Modeling, Science-based Analysis and Information Technology	The CSM Method® defines methods that combine advanced modeling, science based analysis and advanced information technology to produce operational software applications.	Pre-2007	Yes	Yes								The FDA has stolen methods that combine advanced modeling, science based analysis and advanced information technology to produce operational software applications.					
18. Critical Nodes	The CSM Method® defines critical nodes as those elements in a system that are most sensitive to changes in their environments and the methods used to identify them.	Pre-2007	Yes	Yes								The FDA has stolen the methods of determining critical nodes.					
19. Food Emergency Response	The CSM Method® defines methods for determining best response alternatives for food emergencies.	Pre-2007	Yes	Yes								The FDA has stolen methods for determining best response alternatives for food emergencies.					
20. Automated Method to Develop Food Defense Plans	The CSM Method® defines the use of automated methods for developing operational software tools.	Pre-2007	Yes	Yes								The FDA has stolen the methods for developing automated food defense tools.					