

## **EXTRACTIVES OF SILICATE PRODUCTION METHOD**

### **FIELD OF THE INVENTION**

[001] The present invention relates generally to health and wellness formulations, more specifically but not by way of limitation the process of fractionation and extraction in order to isolate extractions for pharmaceuticals and nutraceuticals in a for utilization for treatment of diseases of the human body as well as provide treatment for animals. Furthermore, embodiments thereof can be utilized for environmental treatment.

### **BACKGROUND**

[002] Silicate minerals are very common in the earth's crust as oxygen and silicon are the most abundant elements. The degree of polymerization is denoted by oxygen to silicon ratio. The greater the degree of polymerization, the lower the ratio. With an increase in the degree of polymerization, there is a decrease in the charge per silicon atom, as well as the basicity of silicate mineral. Silica is an acidic oxide. The basic silicate minerals readily react with

disinfectants in treating bacteria, viruses, parasites, diseases, illness bacteria, heavy metals and environmental remediation. However, existing technology is not completely effective in isolation and collection of extractives from silver ions, zeolites, and silicas.

[004] Accordingly, there is a need for a method that provides efficient isolation and collection of extractives from materials such as but not limited to silver ions, zeolites and silicas in order to be utilized in pharmaceuticals and nutraceuticals.

### **SUMMARY OF THE INVENTION**

[005] It is the object of the present invention to provide a method operable to facilitate the isolation and collection of extractives from zeolites, silicas and other similar material wherein the present invention provides a process of fractionation and extraction of silicas, orthosilicates, pyro-silicate, cyclic silicates, chain silicates, amphibiole silicates, all of which may be used with or derived from various elements of the earth, including silver ions, zeolites, zeolite materials and combinations thereof, to isolate extractives for pharmaceuticals and nutraceuticals.

[006] Another object of the present invention is to provide a method for isolating and collecting extractions from silicates for use in pharmaceuticals and nutraceuticals wherein the method of the present invention provides manufacturing and development techniques that involve fractionation, extraction and various cryogenic thermal fracturing techniques of compounds and compositions comprising silicas, orthosilicates, amphibiole silicates, and phyllo silicates and mixtures thereof and wherein the extractives may comprise or be incorporated in pharmaceutical products, nutraceutical products or environmental products and the extractives may include multiple minerals and vitamins, including, but not limited to Vitamin C, Zinc, Niacin, Vitamin D, Vitamin D3, Selenium, Vitamin B, Melatonin, Quercetin, Palmitoylethanolamide (PEA), Specialized Pro-Resolving Mediators (SPMs),

nutraceuticals supplements to assist with aging, detoxification, support of the autoimmune system in removal of heavy metals, various toxins, viruses, bacteria, fungus, and parasites.

[0010] Yet a further object of the present invention is to provide a method for isolating and collecting extractions from silicates for use in pharmaceuticals and nutraceuticals wherein the method of the present invention is adaptable for large scale production to further research in the aspects of e-coli host, yeast cell host, and mammalian cell host for the use in treating various autoimmune disorders, viruses, bacteria, fungi, and parasites in people, animals, and the environment.

[0011] Another object of the present invention is to provide a method operable to facilitate the isolation and collection of extractives from zeolites, silicas and other similar material wherein the method of the present invention includes fractionation and extraction of zeolites, silicas, silver ions and their materials such as but not limited to a silver ion isolate, a zeolite isolate, or silica isolate and their related materials and into their components. Additionally, fractions and extractions provided in the method of the present invention include the extractions, isolations and preparations useful in pharmaceuticals and/or nutraceuticals.

[0012] To the accomplishment of the above and related objects the present invention may be embodied in the form illustrated in the accompanying drawings. Attention is called to the fact that the drawings are illustrative only. Variations are contemplated as being a part of the present invention, limited only by the scope of the claims.

#### **BRIEF DESCRIPTION OF THE DRAWINGS**

[0013] A more complete understanding of the present invention may be had by reference to the following Detailed Description and appended claims when taken in conjunction with the accompanying Drawings wherein:

**DETAILED DESCRIPTION**

[0016] Referring now to the drawings submitted herewith, wherein various elements depicted therein are not necessarily drawn to scale and wherein through the views and figures like elements are referenced with identical reference numerals, there is illustrated an extractive of silicate production method 100 constructed according to the principles of the present invention.

[0017] An embodiment of the present invention is discussed herein with reference to the figures submitted herewith. Those skilled in the art will understand that the detailed description herein with respect to these figures is for explanatory purposes and that it is contemplated within the scope of the present invention that alternative embodiments are plausible. By way of example but not by way of limitation, those having skill in the art in light of the present teachings of the present invention will recognize a plurality of alternate and suitable approaches dependent upon the needs of the particular application to implement the functionality of any given detail described herein, beyond that of the particular implementation choices in the embodiment described herein. Various modifications and embodiments are within the scope of the present invention.

[0018] It is to be further understood that the present invention is not limited to the particular methodology, materials, uses and applications described herein, as these may vary. Furthermore, it is also to be understood that the terminology used herein is used for the purpose of describing particular embodiments only, and is not intended to limit the scope of the present invention. It must be noted that as used herein and in the claims, the singular forms "a", "an" and "the" include the plural reference unless the context clearly dictates otherwise. Thus, for example, a reference to "an element" is a reference to one or more elements and includes equivalents thereof known to those skilled in the art. All conjunctions used are to be understood in the most inclusive sense possible. Thus, the word "or" should be understood as having the definition of a logical "or" rather than that of a logical "exclusive

temperature is required for the method of the present invention, it is contemplated within the scope of the present invention that the method being executed within a temperature range of eight to twenty-six degrees Celsius. Step 103, the fluidized materials are subjected to simultaneous high frequency pulses and shear forces wherein the high frequency pulses and shear forces are of a strength so as to not provide bioactive properties of one or more bioactive components of the silver ion, silica, or zeolite materials. This is operable to provide a first liquid fraction having extractives to be subsequently isolated and a first fractionated silver ion, silica, and zeolite. The first fractionated silver ion, silica or zeolite can be produced either alone or in a combination. The simultaneous high frequency pulses utilized in this step are between about two hundred and three hundred pulses per second. While the aforementioned range is preferred it is contemplated within the scope of the present invention that the high frequency pulses can be up to one thousand pulses per second.

[0022] In step 105 of the process of the present invention continues with separating the first liquid fraction having extractives from the first fractionated silver ion, silica, or zeolite material. This step of separating the first liquid fraction having extractives from zeolites, silver ions, or silicas from the first fractionated zeolite, silver ion or silica materials includes application of a force to the first fractionated materials of zeolite, silicas or silver ions alone or in combination with each other. Step 107, includes isolating the extractives from the first liquid fraction. The isolation comprises contacting the first liquid having extractives with a membrane so as to selectively isolate the extractives based on molecular weight. It should be understood within the scope of the present invention that alternate types of membranes could be employed based on the desired molecular weight of the extractives. Additionally, it should be understood within the scope of the present invention that the process of the present invention could employ water-less cryogenic fractionation to formulate the product. Furthermore, during the process of the present invention for fractioning the zeolite, silica and/or

extractives from the combined first and second liquid fraction. Furthermore, it should be understood within the scope of the present invention that the step can include utilization of E-coli, yeast, or mammalian host cells or scaffold tissue engineering techniques to implement better delivery mechanisms. The components, elements and steps of the aforementioned method embodiment may be interchanged and reconfigured as it pertains to which zeolites, silicas, or silver ions are being utilized as well as it applies to what oils, water and ethanol are employed in step 201.

[0024] In the preceding detailed description, reference has been made to the accompanying drawings that form a part hereof, and in which are shown by way of illustration specific embodiments in which the invention may be practiced. These embodiments, and certain variants thereof, have been described in sufficient detail to enable those skilled in the art to practice the invention. It is to be understood that other suitable embodiments may be utilized and that logical changes may be made without departing from the spirit or scope of the invention. The description may omit certain information known to those skilled in the art. The preceding detailed description is, therefore, not intended to be limited to the specific forms set forth herein, but on the contrary, it is intended to cover such alternatives, modifications, and equivalents, as can be reasonably included within the spirit and scope of the appended claims.

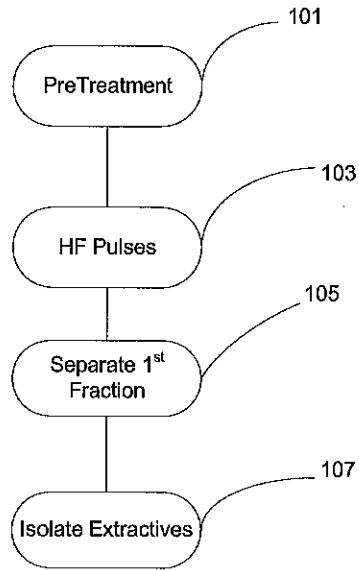


FIG. 1

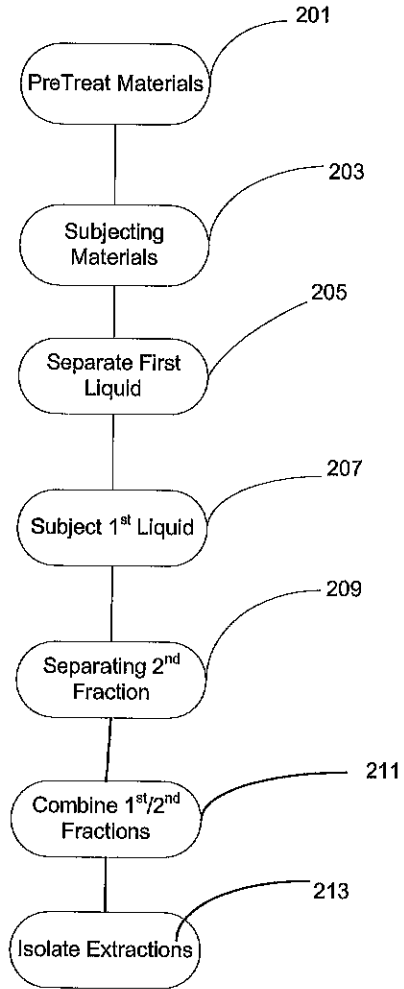


FIG. 2



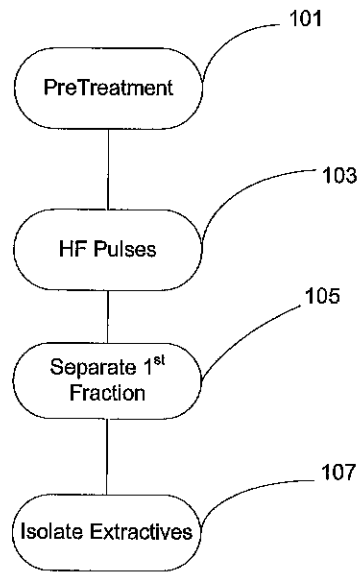


FIG. 1