



[rexresearch.com](http://rexresearch.com)

---

## PYORRHEA PATENTS

---

Ingredients listed in these patents :

Glycolipid fraction from *Oscillatoria Planktothrix* sp... cetyl pyridinium chloride ... chlorohexidine hydrochloride ... dried old orange peel & common rush ... N-acyl derivative of hydroxyproline ... trifluoromethionine ... genus *Thujopsis* of the family cypress ... photocatalytic titanium oxide ... tetraalkoxysilanes ... cineole, methyl salicylate, L- menthol, & shellac ... water-soluble inorganic carbonate & hinokitiol ... *Pinus silvestris* L., lilac leaves & aluminium-potassium alum ... calcium hydrogenphosphate anhydrous salt (mineral name monetite) ... rock salt ... calcium sulfate ... methyl cellulose, hydroxypropyl cellulose ... solvent extract of safflower & a glycyrrhetic acid ... carbazochrome ... sodium tungstate ... hydroxyapatite ... tricalcium alpha-phosphate ... sodium alkyl sulfate & an N-acylglutamate ... fibronectans ... aluminum lactate with ascorbic acid or sodium ascorbate ... vitamin E, vitamin B6, glycyrrhizin, hinokitiol, lysozyme chloride ... epidermal growth factor & urogastrone ... papain ... sodium bicarbonate ... N-(hydroxystyryl)benzamide ... musizin from *Rumex japonicus* Houtt ... perfluorotetrahydrofuran ... ammonium salt of sulfoichthyolic acid, zinc oxide, titanium dioxide & fluid extract of *Hamamelis* ... Superoxide dismutase ... taurine ... pearl powder ... N-(2- hydroxyethyl)nicotinic acid amide nitrate ... bivalent-trivalent iron salt or a bivalent iron salt ... egg white Isozyme ... hydroxyapatite ... bittern magnesium salt, potassium salt, sulfate ion & bromine ion ... green tea ... adlay (*Coix lachryma-jobi* var. *mayuen*) ... black roasted eggplant, active carbon ... guanidine hydrochloride/tris-HCl ... diisopropylamine dichloroacetate ... povidone-iodine & potassium iodide ... [beta]-D-galactose, [beta]-D-acetylgalactosamine, L- rhamnose & [beta]-D-fucose ... propolis ... borneol, globeflower, forsythia fruit, & creat...

---

[http://worldwide.espacenet.com/advancedSearch?locale=en\\_EP](http://worldwide.espacenet.com/advancedSearch?locale=en_EP)

### GLYCOLIPID FRACTION FROM CYANOBACTERIA FOR TREATMENT OF DISEASES OF THE ORAL CAVITY

US2011130351

The present invention relates to the preparation and use of a **glycolipid fraction from *Oscillatoria Planktothrix* sp.**, for the treatment and/or prevention of bacterial gum diseases primarily caused by: *Actinobacillum actinomycetem* concomitans, *Porphyromonas gingivalis*, *Tannerella forsythia*, *Treponema denticola* and even more preferably by *Porphyromonas gingivalis*. Said gum diseases, in particular gingivitis and periodontitis (pyorrhea), are primarily caused by a pro-inflammatory response to components of *P. gingivalis*, leading to destruction of periodontal tissue, and are often accompanied by osteoclastogenesis (increased number of osteoclasts responsible for destruction of bone tissue), and by chronic infection.

---

### PERIODONTAL DISEASE TREATMENT COMPOSITION

JP2010280610

**PROBLEM TO BE SOLVED:** To provide a periodontal disease treatment composition which contains **cetyl pyridinium chloride** in a concentration ( $\geq 0.1$  mass%) showing the same or more plaque formation-inhibiting effect as 0.1 mass% of **chlorohexidine hydrochloride** having been compounded as a general periodontal disease medicine (pyorrhea alveolaris medicine) as a precedent, can dissolve an oil-soluble perfume, has a suitable appearance, reduces a bitter taste and an irritative touch, when applied to an oral cavity, and gives an excellent sense of use. ;  
**SOLUTION:** This periodontal disease treatment composition is characterized by comprising (A) 0.1 to 0.5 mass% of cetyl pyridinium chloride, (B) 1 to 15 mass% of a **2 to 4C mono- or di-hydric alcohol**, (C) 0.05 to 0.2 mass% of 1-menthol and (D) 5 to 50 mass% of glycerol.

---

#### **Manufacture method of powder for treating auricle erosion and pyorrhea** **CN101396487**

The invention discloses a method for producing a powder which is used for curing erosion and suppuration of auricle in three days. By the method, the disease of the erosion and suppuration of the auricle can be cured in a few days, and then the pain of patients is relieved. The method is realized by the following technical scheme: **dried old orange peel and common rush** are put into a container, frozen at minus 10 DEG C for 24 hours, taken out for naturally drying until the moisture content thereof is not more than 5%, made into 400-mesh fine powder, stirred with **borneol** for 10-20 minutes, and bottled after being even to obtain the finished product of the powder.

---

#### **THERAPEUTIC AGENT AND PREVENTIVE SUBSTANCE FOR PYORRHOEA ALVEOLARIS** **JP2007119464**

**PROBLEM TO BE SOLVED:** To provide therapeutic agent and preventive substance for alveolar pyorrhea that can solve the following problems for treatment of pyorrhoea alveolaris, in other word, although it has been said to be caused by bacterium, the cause of the disease is not yet elucidated and terminally sick teeth must be removed and there is no therapeutic agent, further it is very troublesome to kill all of normal mouth bacteria relating to pyorrhoea alveolaris, thus, therapeutic and preventive treatment are desired that can solve these problems and can care each sick tooth and retains high safety even when it is ingested. ; **SOLUTION:** Bactericidal and/or antibacterial components included in spices that are safe foods to human bodies are used as therapeutic agent for pyorrhoea alveolaris. These therapeutic agents for pyorrhoea alveolaris may be the synthetic components same as the bacteriocidal or antibacterial components included in food

---

#### **Oral Composition** **US2008102042** **WO2006046690**

The present invention provides an oral composition which is effective for the prevention or treatment of periodontal disease such as gingivitis, periodontitis and alveolar pyorrhea. According to the present invention, there can be provided an oral composition such as a dentifrice, a mouthwash or a gingival massage cream which is effective for the prevention or treatment of periodontal disease, said composition comprising an **N-acyl derivative of hydroxyproline** such as an N-acetyl derivative, an N-propionyl derivative, an N-butyryl derivative or an N-isobutyryl derivative, or a salt thereof.

---

#### **Compositions for oral use** **US2005175550**

Also published as: KR20030068195 (A) WO02051404

An oral composition comprising **trifluoromethionine** as an effective component is provided as a useful oral composition for preventing and/or treating intraoral diseases such as bad breath, periodontal disease, alveolar pyorrhea, etc., which is safe even if daily used.

---

### **Method for regenerating tooth germ**

**US2007231275**

Also published as: WO2004098670 (A1) JP2004331557

It is an object of the present invention to provide a method for regenerating tooth germ, and more specifically, to provide a method for regenerating tooth germ with a size sufficient for enabling the treatment of patients who have lost teeth or have had teeth damaged by dental diseases such as pyorrhea alveolaris or dental caries. The present invention provides a method for regenerating tooth germ, which comprises culturing tooth germ cells in the presence of a physiologically active substance.

---

### **TOOTH REGENERATION METHOD**

**JP2005145926**

PROBLEM TO BE SOLVED: To provide a method for the regeneration of tooth, more concretely, a method for the regeneration of tooth enabling the treatment of a patient having tooth lost or damaged by dental diseases such as alveolar pyorrhea and dental caries. ; SOLUTION: At least one kind of cell selected from dental embryo cell and a cell enabling the differentiation to the dental embryo cell is collected from a living body and transplanted to the maxilla of the animal to be treated. The tooth is regenerated from the transplanted cell in the maxilla.

---

### **PREPARATION FOR EXTERNAL USE FOR ORAL CAVITY DISEASE**

**JP2005053830**

**JP4550384**

PROBLEM TO BE SOLVED: To provide a preparation for oral cavities useful for preventing and treating periodontoses. ; SOLUTION: This preparation for external use for oral cavity diseases contains an extract from a plant belonging to the **genus Thujopsis of the family cypress** as the active ingredient. Specifically, in this preparation, the oral cavity diseases are periodontoses (pyorrhea alveolaris).

---

### **METHOD FOR REGENERATING TOOTH GERM**

**JP2004357567**

PROBLEM TO BE SOLVED: To provide a method for regenerating a tooth germ, more concretely, a method for regenerating a tooth germ, by which a patient who is deficient in a tooth or has a damaged tooth by a dental disease such as a marginal periodontitis (pyorrhea alveolaris), dental caries, or the like, is treated. ; SOLUTION: The method for regenerating the tooth germ comprises culturing at least one kind of tooth germ cells and cells to be differentiated to the cells and a fibrin-containing carrier

---

### **Method of regenerating tooth germ and a regenerated tooth germ**

**US2006177386**

An object of the present invention is to provide a method for regenerating tooth germ, and more specifically, to provide a method for regenerating tooth germ that enables the treatment of patients

who have lost teeth or have had teeth damaged by dental diseases such as pyorrhea alveolaris or dental caries. The present invention provides a method for regenerating tooth germ by culturing tooth germ cells while giving mechanical stimulus to the cells, and a regenerated tooth germ.

---

## **METHOD OF REGENERATING TOOTH GERM AND REGENERATED TOOTH GERM WO03101502**

It is intended to provide a method of regenerating a tooth germ, more specifically, a method of regenerating a tooth germ whereby a patient suffering from the a defect or injury in a tooth germ due to a dental disease such as marginal periodontitis (pyorrhea alveolaris) or tooth decay can be treated. Namely, a method of regenerating a tooth germ by culturing at least one type of cells selected from among tooth germ cells and cells capable of differentiating into the same on a support and a regenerated tooth germ are provided.

---

## **TOOTHPASTE COMPOSITION USING DEEP SEAWATER JP2002241252**

**PROBLEM TO BE SOLVED:** To provide a toothpaste composition having high palatability, excellent therapeutic effects such as prophylaxis of gingivitis and pyorrhea alveolaris, and efficiently making minerals and natural rare elements absorb. **SOLUTION:** This dentifrice composition comprises natural salts included in deep seawater obtained by collecting seawater from the deep sea in 200 m or more depth.

---

## **DENTAL AND ORAL COMPOSITION CA2327230**

Also published as: EP1104669 // EP1104669 // US6951463

The present invention provides a dental and oral composition capable of inhibiting dental plaque deposition and decomposing dental plaque to thereby prevent and cure dental diseases and oral diseases such as dental caries, gingivitis, periodontitis and other peridental diseases (pyorrhea alveolaris, etc.), stomatitis, etc., and effective for preventing discoloration of teeth and dental materials and for preventing and removing halitosis. The invention further provides for a method of using the composition for dental and oral care. The dental and oral composition contains a **photocatalytic titanium oxide** or its precursor; at least one selected from silicon compounds such as **tetraalkoxysilanes**, silicone resins and their precursors and silica; and a liquid medium; or it contains a photocatalytic titanium oxide or its precursor and a liquid medium.; The method for oral and dental care comprises applying the composition to teeth, gums, oral mucous membranes or dental materials in the mouth, or applying the composition to dental materials not in the mouth, to thereby fix photocatalytic titanium oxide on them or form a photocatalytic titanium oxide-containing film on them.

---

## **MOUTH WASHES, AND CONTAINER FILLED WITH MOUTH WASHES JPH11165778**

**PROBLEM TO BE SOLVED:** To improve the usability by pressing a spray button of a manual spray container filled with mouth washes to spray the mouth washes from a nozzle and to facilitate the spray of the mouth washes used for decayed tooth, alveolar pyorrhea, etc. **SOLUTION:** Mouth washes which is the solution having the sterilizing action or the anti-inflammatory action to be used for prevention of decayed tooth, alveolar pyorrhea, and bad breath, mainly consists of the sterilization agent or the anti-inflammatory agent, and contains shellac. That is, the sterilization agent and the shellac are dissolved in the ethanol and propylene glycol, and more preferably, the mouth washes containing **cineole, methyl salicylate, L- menthol, and shellac dissolved in**

**ethanol and propylene glycol**, is used. The mouth washes are filled in a manual spray container, the mouth washes are sprayed into water in a glass by pressing the spray button of the container to be diluted, and the diluted water is kept in the mouth to wash the mouth.

---

## COMPOSITION FOR ORAL CAVITY

**JPH11130648**

**PROBLEM TO BE SOLVED:** To obtain a composition for oral cavity stably mixable with hinokitiol under weakly alkali conditions, preferably usable in one's mouth, preferably useful as a dentifrice, a liquid tooth paste, a paste for oral cavity, a therapeutic agent for periodontal diseases, etc., for preventing and treating periodontal diseases such as marginal gingiva, alveolar pyorrhea, etc., and tooth decay, etc. **SOLUTION:** This composition is obtained by formulating a composition for oral cavity containing a **water-soluble inorganic carbonate and hinokitiol** with one or more **water-soluble sulfites selected from a sulfite, a bisulfite and a metabisulfite. Sodium hydrogencarbonate, sodium carbonate, potassium hydrogencarbonate, potassium carbonate, lithium hydrogencarbonate, ammonium carbonate**, etc., may be cited as the water-soluble inorganic carbonate. A sulfite such as sodium hydrogensulfite, sodium sulfite, etc., and a bisulfite or a metabisulfite may be cited as the water-soluble sulfite.

---

## LIQUID DENTAL PREPARATION

**BG101470**

The useful model relates to a preparation, in particular togum and oral cavity water, for external use as prevention and therapeutical preparation for medicamentous therapy of gingivitis, stomatitis and pyorrhea. The preparation contains aqueous extract of resin from **Pinus silvestris L., lilac leaves and aluminium-potassium alum**.

---

## DENTIFRICE COMPOSITION

**JPH08301741**

**PURPOSE:** To obtain a dentifrice composition for brushing teeth without shaving and damaging natural teeth of main body by technology different from conventional one, effectively removing food refuse held between teeth and a bacterium lump, bringing about an excellently cleaning feeling, effectively preventing dental caries and alveolar pyorrhea. **CONSTITUTION:** This powdery or pasty dentifrice composition is obtained by uniformly blending 1-95wt.% of **calcium hydrogenphosphate anhydrous salt (mineral name monetite:  $\text{CaHPO}_4$ )** having  $\geq 0.1[\mu\text{m}]$  and  $\leq 10[\mu\text{m}]$  powder particle size with 5-99wt.% of the total of additives such as a wetting agent, a foaming agent, a perfume, a sweetener, a fungicide, etc.

---

## REMEDIAL AGENT FOR PYORRHEA ALVEOLARIS

**JPH0899848**

**PURPOSE:** To provide a remedial agent for pyorrhea alveolaris in a form of a gel by kneading calcium sulfate together with water and salts and can effectively act on the affected areas to heal it basically and remove dental calculus and bacterial plaque. **CONSTITUTION:** This therapeutic agent is obtained in the form of gel by kneading calcium sulfate together with water and salts. This agent is obtained by dissolving **rock salt (60-100g) in boiling water (1.8 liter) and admixing powdery calcium sulfate of 0.8-1.2 liter powder volume**, while the salt solution is still hot, and kneading them well. The calcium sulfate is obtained, for example, by adding dilute sulfuric acid to an aqueous solution of a soluble calcium salt and precipitating the dihydrate salt.

---

## PHARMACEUTICAL PREPARATION FOR REMEDYING PERIODONTOSIS AND ITS PREPARATION

**JPS59222406**

**PURPOSE:**The titled filmy or sheet pharmaceutical preparation for retaining a drug in a parodontium pocket, etc. with providing the affected part with pain irritation for a long time to show effectively remedying effect, consisting of a specific water-soluble high polymer substance and the drug for remedying periodontosis.; **CONSTITUTION:**The pharmaceutical preparation effective for remedying pyorrhea alveolaris, etc., being inserted into a parodontium pocket or gum part for use, consisting of (A) a water-soluble high polymer substance having 10-250kg/mm.<2>, especially 15-200kg/mm.<2> Young modulus at 25 deg.C at 65% relative humidity, and 5-30,000 centipoise, especially 10-27,000 centipoise at 2wt% aqueous solution at 20 deg.C, such as a polysaccharide, its derivative and/or water-soluble vinyl polymer, especially **methyl cellulose**, **hydroxypropyl cellulose**, or combination of the compound and polyacrylic acid or its salt, and (B) a drug for remedying periodontosis having germicidal action, bacterolysis action, plaque dissolving action, anti-inflammation action, etc.

---

## COMPOSITION FOR ORAL CAVITY APPLICATION

**JPS59227812**

**PURPOSE:**To provide the titled composition containing a **solvent extract of safflower and a glycyrrhetic acid** (salt) in combination with a **carbazochrome** compound, having remarkable synergistic hemostatic activity, and exhibiting the increased activity of the carbazochrome compound to fortify the peripheral vessels. **CONSTITUTION:**The composition contains (A) 0.001-1wt% (especially 0.01- 0.5wt%) of a carbazochrome compound which is a peripheral vessel fortifying agent having not necessarily sufficient hemostatic effect by the single use, with (B) 0.001-5wt% (especially 0.1-2wt%) of a synergist component selected from solvent extract of safflower, glycyrrhetic acid and its salt which has no hemostatic effect in itself. The obtained composition has extremely high hemostatic activity, and is effective for the prevention and remedy of gingivitis, pyorrhea, etc.

---

## DENTIFRICE

**JPS6025911**

**PURPOSE:**A novel dentifrice showing excellent medicinal effect on pyorrhea alveolaris and halitosis caused by it in use for preventing and remedying them, obtained by adding **sodium tungstate** as an addition agent to dentifrice components. **CONSTITUTION:** Since it is said that pyorrhea alveolaris is caused by excess of peroxide lipid in the blood, in order to reduce the peroxide lipid in the blood to unsaturated fatty acids, sodium tungstate is added to dentifrice components. The dentifrice is attached to toothbrush, the teeth are brushed, so that sodium tungstate in the dentifrice is absorbed in the root of a tooth, peroxide lipid in the gum part is reduced, an attack of pyorrhea alveolaris is prevented or pyorrhea alveolaris is remedied.

---

## REPARATIVE MATERIAL FOR ALVEOLAR BONE

**JPS6061512**

**PURPOSE:**A reparative material for alveolar bones, consisting of a reparative base material consisting of a **hydroxyapatite** spacer and a fluid binder consisting essentially of **tricalcium alpha-phosphate**, and useful for recovering the function of unstable teeth and repairing degenerated alveolar bones, etc. **CONSTITUTION:**A reparative material for alveolar bones, consisting of a hydroxyapatite spacer as a reparative base material and a fluid assistant consisting essentially of tricalcium alpha-phosphate powder as a binder thereof, and usable for recovering the function of teeth unstabilized by periodontitis or external wounds, etc. due to traffic accidents or reinforcing alveolar bone parts degenerated by pyorrhea alveolaris, etc.; The hydroxyapatite has a

remarkable affinity for bones or the living body, and is worked according to the cavity of the affected part and inserted into the above-mentioned cavity to treat easily the affected part with certainty. The above-mentioned binder has the activity of adhering and fixing the spacer, and contributes to remarkable promotion of bone induction or joining.

---

## **DENTIFRICE COMPOSITION CONTAINING SODIUM CHLORIDE**

### **JPS6092208**

**PURPOSE:**The titled dentifrice, containing **sodium alkyl sulfate** and an **N-acylglutamate** together, and capable of improving the low foaming property of a dentifrice containing **sodium chloride**, and having preventing and remedial effect on periodontoses and further a good feeling of use. **CONSTITUTION:**A dentifrice, containing sodium chloride, and obtained by incorporating usually 0.1-3wt% each, preferably 0.5-3wt% sodium alkyl sulfate and preferably 0.2-1.0wt% N-acylglutamate as a foaming agent in a dentifrice containing usually 5-30wt% sodium chloride, and having improved foaming property even on incorporating sodium chloride having a preventing and treating effect on periodontoses, e.g. gingivitis or pyorrhea alveolaris, and further a good feeling of use without deteriorating a foaming assistant even in storage for a long period.

---

## **COMPOSITION FOR ORAL CAVITY**

### **JPS61130212**

**PURPOSE:** A composition for oral cavity that contains **fibronectans**, thus preventing periodontal diseases such as pyorrhea alveolaris, because it inhibits *Bacteroides gingivalis* from haemoagglutination to avoid its colonization in oral cavity. **CONSTITUTION:**A composition for oral cavity, such as tooth paste, tooth powder, mouth washing, troche, or chewing gum is combined with 0.001-0.5wt%, preferably 0.005-0.2wt%, based on the total composition, of fibronectins to inhibit *Bacteroides gingivalis* from haemoagglutination and the colonization in mucous membranes whereby periodontal diseases is effectively prevented. Fibronectins have physiological activity, however, they do not affect the growth of the bacterium and its mild action inhibits the bacterium to form colonies in oral mucosa.

---

## **COMPOSITION FOR ORAL CAVITY**

### **JPS61186308**

**PURPOSE:**The titled composition effective for remedying diseases in the oral cavity, especially pyorrhea alveolaris, having enhanced astringency in the gingiva, obtained by blending a composition for the oral cavity containing **aluminum lactate** with **ascorbic acid or sodium ascorbate**. **CONSTITUTION:** A composition for the oral cavity containing aluminum lactate is blended with ascorbic acid or sodium ascorbate. The content of aluminum lactate in the composition for the oral cavity is 0.1-2wt% based on the total amounts of the composition and the amount of ascorbic acid or sodium ascorbate blended is preferably 3-50wt% based on the content of aluminum lactate in the case of toothpaste.

---

## **COMPOSITION FOR ORAL CAVITY**

### **JPS61286314**

**PURPOSE:**A safety composition for oral cavity effective for preventing and remedying periodontosis in almost all symptoms, especially gingivitis and pyorrhea alveolaris, obtained by blending ubiquinone-10 with a drug for alleviating periodontosis. **CONSTITUTION:**A composition for oral cavity such as especially dentifrice, gingiva massaging cream, etc., in the dosage form having massaging effect, is blended with (B) ubiquinone-10 shown by the formula having vitamin-like action and high safety free from side effects and (B) 0.0001-20wt%, preferably 0.001-10wt%,

especially 0.01-2wt% based on the total amount of the composition of one or more vitamin agents selected from especially **vitamin E, vitamin B6, glycyrrhizin, hinokitiol, lysozyme chloride** and their derivatives or an anti-inflammatory drug as a drug for alleviating periodontosis, to give the composition for oral cavity having the above-mentioned effects. The composition is estimated that the component A raises the mucosa absorption ratio of the component B and assists the action to show the effects.

---

## COMPOSITION FOR ORAL CAVITY

### JPS62263115

PURPOSE: A composition for oral cavity showing excellent preventing and remedying effects on periodontosis such as periodontitis, pyorrhea alveolaris, etc., obtained by blending a composition for oral cavity with epidermal growth factor and/or urogastrone. CONSTITUTION: A composition for oral cavity is blended with 10<-5>-1,000ppm based on total amount of the composition of a compound selected from **epidermal growth factor and urogastrone** which are known to exist in tissue, milk, saliva, blood, urine, etc., derived from animal such as horse, bovine, etc., and to have remedying effects on wounds in a skin range.

---

## DENTIFRICE COMPOSITION

### JPS6335516

PURPOSE: To obtain a dentifrice composition capable of keeping the activity of an anti-inflammatory enzyme **papain** over a long period and exhibiting remarkable effect against periodontosis, by using an aqueous solution of **sodium bicarbonate** as a substrate solvent and adding the above enzyme and a specific foaming agent to the solvent. CONSTITUTION: A substrate solvent produced by dissolving 10-40(wt)%, preferably 15-30% sodium bicarbonate based on the whole water content of the dentifrice composition is compounded with 0.1-0.25% papain of 500-100,000 unit/g as an anti-inflammatory enzyme and 0.2-10% each of sodium N-laurylsarcosine and sucrose lauric acid ester as a foaming agent.; The mixture is further compounded with sorbitan (preferably at an amount of 30-40%) which is a wetting agent necessary for the stable compounding and effective in improving the survival ratio of the enzymatic activity and aluminum hydroxide acting as an abrasion material. The composition has anti-inflammation and tartar-deposition preventive effects relating to gingivitis and pyorrhea, cleans and keeps the teeth and oral cavity in clean state and prevents periodontosis.

---

## COMPOSITION FOR ORAL CAVITY

### JPS6344514

PURPOSE: To obtain a composition for oral cavity having improved preventing and remedying effects on periodontal diseases such as periodontosis, pyorrhea alveolaris, etc., containing **N-(hydroxystyryl)benzamide**. CONSTITUTION: A composition for oral cavity containing 0.001-5wt% compound shown by the formula as an essential component. The composition can be processed into any dosage form such as toothpaste, tooth powder, lubricating dentifrice, water dentifrice, etc., paste for oral cavity, mouthwash, refreshing agent in the mouth, chewing gum, etc., and can be blended with components usually used in a composition for oral cavity such as water, wetting agent, brushing agent, surface active agent, sweetener, spice, germicide, anti-inflammatory drug, foul removing agent, fluorine compound, etc., depending upon the type of composition.

---

## COMPOSITION FOR ORAL CAVITY

### JPS6388117

PURPOSE: To obtain a safe composition for oral cavity, having excellent effects on prevention and



treatment of periodontal diseases such as periodontitis, pyorrhea alveolaris, etc., containing **musizin** as an active ingredient. CONSTITUTION: A composition for oral cavity having effects on periodontal diseases of almost all symptoms, especially effective for preventing and treating periodontitis and pyorrhea alveolaris, containing 0.001-5.0wt%, preferably 0.005-0.5wt% calculated as active ingredient of musizin shown by the formula obtained by synthesis or extraction from the natural world (e.g. one from **Rumex japonicus Houtt.**, perennial polygonaceous plant naturally growing in wet lands of each part of Japan). The composition is further blended with any of other drugs for alleviating periodontal diseases to raise effects synergistically. Although musizin is a little unstable to light rays, musizin can be stably added to the composition by liposome formation, etc., and raise mucosa absorption. Further the root of *Rumex japonicus* Houtt, is useful as a drug for skin disease and laxative and musizin has extremely high safety.

---

## COMPOSITION FOR ORAL CAVITY

### JPS63132819

PURPOSE: To provide a composition for oral cavity, compounded with a fluorinated carbon compound capable of easily dissolving oxygen, effective in supplying a large quantity of oxygen to the oral cavity to suppress the proliferation of anaerobes causing periodontal diseases and exhibiting preventive effect against periodontal diseases such as pyorrhea alveolaris.

CONSTITUTION: The objective composition for oral cavity having the above effects can be produced by adding one or more fluorinated carbon compounds capable of easily dissolving oxygen and selected from preferably **perfluorotetrahydrofuran, perfluorobutyltetrahydrofuran, perfluorotributylamine, perfluorinated ether, perfluorodecalin, perfluoromethyldecalin and perfluoroadamantane** to an oral cavity composition such as dentifrice, mouthwash, gingival massaging agent, etc., and dissolving oxygen in the composition at high concentration. The amount of the fluorinated carbon compound in the whole composition is preferably 0.1-30wt%.

---

## Methods for treating gingivitis and paradental pyorrhea

### US4879106

A composition for preparing a medicament for topical treatment of paradentium diseases, said composition comprising the **ammonium salt of sulfoichthyolic acid, zinc oxide, titanium dioxide and fluid extract of Hamamelis** in a pharmaceutically acceptable carrier. Said composition is useful especially for treatment of gingivitis and alveolar pyorrhea.

---

## A composition for periodontal use.

### EP0273579

Also published as: US4842846

**Superoxide dismutase** (e.g.  $1 \times 10^{-4}$  to 1.0 wt percent), optionally along with catalase (e.g.  $1 \times 10^{-4}$  to 1.0 wt percent) and/or one or more amino acids such as **taurine** (e.g. 0.05 to 5.0 wt percent) is used in compositions such as solids (tablets, dentifrice) ointments, or liquids for application to the gingivae to treat or prevent inception of alveolar pyorrhea.

---

## DENTIFRICE

### JPH01199907

PURPOSE: To obtain a dentifrice, useful for treating and preventing dental diseases, such as dental caries, pericementitis, alveolar pyorrhea, etc., by blending heat-treated **pearl powder** with other ingredients. CONSTITUTION: A dentifrice obtained by heat-treating pearl powder at 200-1,600 deg.C, especially at 700-900 deg.C for 1-50 hr and blending the resultant powder in an amount of  $\geq 20$ wt.%, preferably  $\geq 30$ wt.% with other ingredients in the dentifrice. Calcium contained in the

pearl powder is activated by the heat treatment and calcium ions are slowly released to exhibit sustained effects.

---

## COMPOSITION FOR ORAL CAVITY

### JPH0232009

**PURPOSE:** To obtain a composition for oral cavity effective for preventing and treating periodontosis, having excellent safety and utility containing **N-(2- hydroxyethyl)nicotinic acid amide nitrate** or a salt thereof as an active ingredient. **CONSTITUTION:** A composition for oral cavity containing 0.01-1wt.% compound shown by the formula or salt thereof effective for preventing and treating periodontosis such as periodontitis or pyorrhea alveolaris. The composition can be blended with water, wetting agent, abradant, binder, surfactant, sweetener, spice, antiseptic mildew proofing agent, dyestuff, germicide, antiphlogistic, agent for removing foul breath, fluorine compound, etc., besides the essential component and used in any form dosage of toothpaste, tooth powder, wet dentifrice, water dentifrice, paste for oral cavity, mouthwash, refreshing agent for the mouth, chewing gum, etc.

---

## COMPOSITION FOR ORAL CAVITY APPLICATION

### JPH0253716

**PURPOSE:** To obtain the subject composition for oral cavity application capable of effectively suppressing the fixing of oral bacteria to the oral cavity and useful for the prevention of oral diseases such as gingivitis, alveolar pyorrhea and dental caries by compounding an egg, etc., obtained from poultry immunized with whole cell of oral cavity bacteria. **CONSTITUTION:** The whole cell or a cell component of oral bacteria such as *Bacterioides gingivalis* and *Streptococcus mutans* is used as an antigen. A poultry such as chicken, domestic duck or quail is immunized with the antigen or a combination of two or more kinds of the antigens together with an adjuvant by subcutaneous or intramuscular injection or oral administration together with feed or water. The egg, yolk or a water-soluble yolk fraction obtained from the immunized poultry is used as a component of the objective composition. The administration rate of the egg, etc., is preferably 0.0001-50g/kg/day. Since the antibody-containing component has excellent miscibility, the oral composition can be easily prepared without problem. The composition is used as toothpaste, wet dentifrice, mouth wash, oral pasta, etc.

---

## DENTIFRICE COMPOSITION

### JPH02184615

**PURPOSE:** To obtain a dentifrice composition effective in promoting the health of tooth and gum and exhibiting excellent effect for the prevention and remedy of periodontosis, prevention of foul breath, prevention of dental caries, hemostasis in toothbrushing, etc., by compounding a **bivalent-trivalent iron salt or a bivalent iron salt** composition. **CONSTITUTION:** The objective composition is produced by compounding a bivalent-trivalent iron salt, table salt containing a bivalent-trivalent iron salt or a bivalent iron salt composition as essential components. The obtained composition exhibits the above-mentioned effects by the action of the bivalent-trivalent iron salt or the bivalent iron salt composition and is effective as a preventive or remedy for periodontosis such as alveolar pyorrhea or gingivitis.; The bivalent-trivalent iron salt can be produced as a transition state obtained by throwing a trivalent iron salt (or a bivalent iron salt) into a large amount of strong alkaline aqueous solution (or a strong acid aqueous solution) to cause the atomic valence conversion to bivalent iron (or trivalent iron). The bivalent iron salt composition is derived from a bivalent iron salt, an amino acid and a reducing substance and is a bivalent iron salt stabilized in the form of an organic complex.

---

## DENTAL TREATING MATERIAL

### JPH0320203

**PURPOSE:** To obtain a dental treating material capable of preventing progress of carious teeth and occurrence of halitosis and further capable of preventing pyorrhea alveolaris by adding an inorganic antimicrobial agent to a resin for forming dental prostheses and resin for filling carious teeth and kneading the resultant mixture. **CONSTITUTION:** A dental treating material obtained by adding an inorganic antimicrobial agent (e.g. **Bactekiller(R)**) nontoxic to human bodies to a resin for forming dental prostheses and a resin for filling carious teeth and kneading the resultant mixture. The Bactekiller(R) is prepared by adding antimicrobial metal ions to zeolite and capable of exhibiting better effects thereof under conditions of high humidities. Thereby, dental prostheses and dentures made from the above-mentioned dental treating material are capable of preventing proliferation of various germs, etc., during mounting thereof in the oral cavity and further preventing carious teeth, pyorrhea alveolaris, etc., and occurrence of halitosis without any activity of bacteria Streptococcus mutans, etc., even if food residues remain. Furthermore, since the antimicrobial agent is kneaded with the resins, washing can also be carried out and effects thereof can be sustained for a long period.

---

## CHEWING GUM FOR PREVENTING PYORRHEA ALVEOLARIS

### KR0125282

A gum containing unique natural ingredients to prevent and control pyorrhea alveolaris (gingivitis) is prepared by adding **egg white isozyme 0.2~3.0%**, which has antibacterial, antiviral, hemostatic, and anti-inflammatory effects, and mace extract 0.05~0.5%, which has an effect on microorganisms, into the mixture paste at 60 deg.C or below, pH 3.5~7.0.

---

## DENTIFRICE

### JPH04164019

**PURPOSE:** To obtain a dentifrice having safety, stability, removing protein, amino acid and other organic matters and protecting the surface of teeth by blending a dentifrice base with apatite carrying an antimicrobial metal. **CONSTITUTION:** A dentifrice base is blended with antimicrobial **hydroxyapatite** prepared by supporting an antimicrobial metal on hydroxyapatite by ion exchange and/or adsorption. The amount of the antimicrobial metal supported on apatite is  $\leq 30\text{wt.}\%$ , preferably 0.0001-5wt.%. The antimicrobial metal supported on hydroxyapatite is properly blended with ordinarily usable abradant, blowing agent, flavoring agent, lubricant, binder, medicinal compound, etc., to give the objective dentifrice. Periodontal disease such as pyorrhea alveolaris and hypersthesis caused by tooth decay can be prevented. Ag, Cu or Zn is used as the antimicrobial metal.

---

## DENTIFRICE FOR THERAPEUTIC TREATMENT OF PYORRHEA

### JPH04187626

**PURPOSE:** To obtain a dentifrice for therapeutic treatment of pyorrhea capable of effectively curing pyorrhea without applying pain to the diseased part by using bittern as a main component. **CONSTITUTION:** The objective dentifrice is produced by using bittern as a main component, preferably kneading bittern with a proper amount of water to form a gel or further mixing 10-50% tooth powder based on **50-90% bittern**. Since bittern is absolutely free from sodium chloride and is odorless and tasteless, the dentifrice does not cause pain at the diseased part of pyorrhea when tooth is brushed with a tooth-brush holding the dentifrice. Components of bittern such as **magnesium salt, potassium salt, sulfate ion and bromine ion** effectively act on the diseased part of pyorrhea to cure the disease.

---

## COMPOSITION FOR ORAL CAVITY

JPH04273814

JP2619841

PURPOSE: To obtain a composition for the oral cavity, capable of suppressing inflammations of gingivae and excellent in preventive effects on pyorrhea alveolaris and gingivitis.

CONSTITUTION: A composition for the oral cavity is characterized in that a green tea extract prepared by preserving raw leaves of the **green tea** under anaerobic conditions and carrying out steam heating treatment and/or drying treatment thereof in an amount of  $\geq 0.01\%$  expressed in terms of solid substance is blended. The aforementioned composition has recognizable improving effects on flare, swelling, hemorrhage, etc., of gingivae and is excellent in prevention of pyorrhea alveolaris and gingivitis.

---

## DRINK, FOOD OR ORAL CAVITY PRODUCT CONTAINING ADLAY EXTRACT

JPH0523153

PURPOSE: To provide the subject drink, food or oral cavity product containing an anti-bacterial substance which is originated from **adlay (Coix lachryma-jobi var. mayuen)**, has an action to inhibit the growth of dental caries bacteria (*Streptococcus mutans*, *Streptococcus sobrinus*) and alveolar pyorrhea bacteria (*Porphyromonas gingivalis*) and is useful as a preservative for fishes, pickles, milk products, etc. CONSTITUTION: An adlay-originated anti-bacterial substance obtained by extracting the plant bodies of the adlay with a solvent such as ethanol is added to a food such as juice, coffee or carbonated beverage to provide the objective drink, food or oral cavity product.

---

## TOOTHPASTE COMPOSITION AND ITS PRODUCTION

JPH0558865

PURPOSE: To provide the subject composition excellent in the manifestability of the formulation effect of common salt as active ingredient, also good in granular appearance. CONSTITUTION: The objective toothpaste contains  $\geq 14\text{wt.}\%$  of common salt. Specifically, granular **common salt** is contained in the composition at  $\geq 4\text{wt.}\%$  and 10-15wt.% of the granular common salt have  $\geq 300\mu\text{m}$  granular size. The size distribution of the common salt to be formulated is such that the portion having  $\leq 150\mu\text{m}$  granular size accounts for  $\leq 10\text{wt.}\%$  of the total common salt and the portion with  $\geq 300\mu\text{m}$  granular size 10-50wt.%. This toothpaste, composition is effective for the prevention or therapy of periodontosis such as gingivitis and alveolar pyorrhea.

---

## DENTIFRICE

JPH05105616

PURPOSE: To obtain a dentifrice having safety to living body, blended with a naturally producible substance having excellently preventing and treating effects on gingivitis and pyorrhea alveolaris and further adsorbing effects on a foul breath caused by gingivitis and pyorrhea alveolaris.

CONSTITUTION: A dentifrice such as toothpaste or tooth powder blended with  $\leq 5\%$  **black roasted eggplant, active carbon** or both as an active ingredient and preferably with **sodium chloride**. The dentifrice can effectively prevent and treat gingivitis and pyorrhea alveolaris by adsorbing dental bacterial plaque, dental calculus and bacteria with the adsorbents and the effects are further increased by synergistic high-osmotic effect of sodium chloride.; The dentifrice has adsorbing effects on a foul breath, especially black roasted eggplant brings about refreshing feeling of brushing and removes an unpleasant feeling in the mouth. Since a naturally producible substance is used as an adsorbent, the dentifrice has no danger to living body at all, even used for a long period of time.

---

---

## NEW OSSIFICATION-INDUCING PROTEIN AND OSSIFICATION-INDUCING AGENT CONTAINING THE PROTEIN AS ACTIVE COMPONENT

### JPH05140200

**PURPOSE:**To provide the subject new protein obtained from vertebrate bone, having specific molecular weight and specific activity, enabling the prevention and radical cure of the falling off of tooth by alveolar pyorrhea and osteoporosis and the shortening of the treating time of bone fracture and useful as an agent for ossification, etc. **CONSTITUTION:**Proteins are extracted from vertebrate bones with 4M **guanidine hydrochloride/tris-HCl** solution after removing minerals from the bones. The extracted liquid is brought into contact with an anion exchange material and the non-absorbed proteins are brought into contact with heparin agarose.; The adsorbed proteins are eluted to separate an ossification-inducing active fraction, which is purified by successively treating with **butylcellulofine, hydroxyapatite, superlose HR12, ConA agarose and an adsorptive resin** to obtain the objective new ossification-inducing protein having molecular weight of about 32kd (measured by SDS polyacrylamide gel electrophoresis in the absence of reducing agent) and about 16kd and 13kd (measured by the similar electrophoresis in the presence of a reducing agent) and a specific activity of about  $\geq 7,000$  unit/mg-protein measured e.g. by the method of Sampath, et al.

---

## COMPOSITION FOR ORAL CAVITY

### JPH05213727

**PURPOSE:**To provide the subject composition having improving effects for inflammations such as the rubor, swelling, or hemorrhage of the gingivae, thus excellent in the prevention of alveolar pyorrhea and gingivitis, etc. **CONSTITUTION:**The objective composition having the advantages mentioned above can be obtained by formulating (A) an original composition for oral cavity such as toothpaste, tooth powder, mouthwash, troche, or chewing gum with (B) as active ingredient, 0.001-10 (esp. 0.01-3)wt.%, based on the whole amount of the final composition, of **diisopropylamine dichloroacetate** of the formula. Other ingredient(s) to be formulated can be selected, as the case may be, according to the type of the final composition.

---

## TREATING AGENT FOR GINGIVITIS AND PYORRHEA

### JPH061713

**PURPOSE:**To provide an agent containing **povidone-iodine** and exhibiting excellent effect on gingivitis and pyorrhea by oral cavity application. **CONSTITUTION:**The composition for oral cavity application contains at least (A) 0.1-20 pts.wt. of povidone-iodine as an active component and (B) 0.1-4.0 pts.wt. of **potassium iodide** as a stabilizer.

---

## ORAL CAVITY HYGIENE COMPOSITION CONTAINING AMINOSUGAR AS ANTIBACTERIAL PLAQUE

### JPH0624948

**PURPOSE:** To obtain a composition capable of inhibiting both or any of development and growth of bacteria which are liable to cause dental plaque formation, from occurring. **CONSTITUTION:** This composition contains an amount effective in anti-plaque action of an amino sugar represented by the formula  $A^{<1>-NRR^{<1>}$  (wherein:  $A^{<1>}$  is sugar which is selected from **[beta]-D-galactose, [beta]-D-acetylgalactosamine, L- rhamnose and [beta]-D-fucose** and contains a sugar part capable of recognizing the presence of lectin on oral bacteria; N is bonded to an anomeric carbon atom of a reduced terminal part of sugar  $A^{<1>}$  ; and each of R and  $R^{<1>}$  is H, an aliphatic, aromatic or alicyclic hydrocarbon group), wherein as the amino sugar, a compound such as at least one N-heptylgalactosylamine can be used. This compound is capable of effectively preventing agglutination and deposition of bacteria on based thereby and has excellent antibacterial activity, and also, is useful for preventing plaque formation, plaque-induced diseases, dental calculus

formation, dental caries, pyorrhea alveolaris and periodontal diseases from occurring.

---

## **COMPOSITION FOR ORAL CAVITY**

**JPH06219930**

**JPH06172390**

**PURPOSE:** To obtain a composition for oral cavity capable of exhibiting improving effects on rubefaction, oncoides, bleeding, etc., of giniva and expecting prevention of alveolar pyorrhea and gingival crest. **CONSTITUTION:** The composition for oral cavity comprises the **dried material of sea water**. As the dried material of sea water, a material obtained by directly subjecting sea water to lyophilization using sea water as a raw material may be used, but a material obtained by carrying out desalting of sea water by reverse osmosis membrane is especially preferably used in order to decrease salts causing tackiness. This desalted dried material of sea water contains very small amount of elements such as magnesium, potassium and phosphorus in abundance except that amounts of chlorine and sodium are decreased, compared with the material obtained by directly subjecting sea water to lyophilization. The material desalted by a desalting apparatus or a reverse osmosis membrane is preferable even on workability or stability in the case blended with a product.

---

## **OSTEOGENESIS MATERIAL**

**JPH07112023**

**PURPOSE:** To generate in an early period cells and blood vessels into the osteogenesis material formed obtd. by intimately mixing a chitosansol with a mixture composed of oxide powder and inorg. for the oxide powder and hydroxy apatite, animal bones, etc., for the inorg. powder. **CONSTITUTION:** This osteogenesis material is useful as a filler and supply material used for root canal filling, bone supply, fixing of pyorrhea teeth, etc., in the field of dentistry or orthopedics and includes the mixture composed of the oxide powder and the inorg. powder and includes the **chitosan sol** kneaded together with this mixture. The **calcium silicate, calcium oxide and magnesium oxide** are used as the oxide powder. At least one among **hydroxy apatite, animal bones, alpha type tricalcium phosphate, and beta type tricalcium phosphate** are used as the inorg. powder. As a result, the time when the osteogenesis material decays within the living body is freely controlled and the cells and blood vessels are generated in the osteogenesis material in the early period.

---

## **DENTIFRICE FOR MEDICAL TREATMENT OF ALVEOLAR PYORRHEA FORMULATED WITH SPICE**

**JPH1036277**

**PROBLEM TO BE SOLVED:** To provide a dentifrice useful for medical treatment, prevention of alveolar pyorrhea by improving the blood circulation of gums. **SOLUTION:** This dentifrice uses a conventional dentifrice mixed with a spice (e.g.; **Guinea pepper**). This dentifrice prevents, cures the alveolar pyorrhea of gums by using the spice effects of Guinea pepper, etc., such as improving the blood circulation effect, bactericidal action, deodorizing action. Pulmonary tuberculosis of a bedridden old man caused by penetration of saliva into bronchial tube can be prevented by the bactericidal action accompanied by daubing the dentifrice containing spice, cream with a spice, jelly on a gum. Using these blood circulation improving effect of the spice, this dentifrice is capable of curing interruption in blood circulation part of the body, chilblain in winter.

---

## **MEDICAMENTOUS FORM FOR THE TREATMENT OF HAEMORRHAGIC AND PYORRHEIC FORM OF THE PARADONTOSIS AND CATARRH GINGIVITIS**

**BG103499**

The medicamentous form for the treatment of haemorrhagic and pyorrhea-form of paradontosis and the catarrh gingivitis contain alcohol extract of 10 to 95% alcohol and the **leaves of Arom Maculatum** . The form is produced from green and dry leaves of Arom Macolatum in ratio 1 kg green matter and 1 l of alcohol, and for the dry material - 1kg of and 3 l of alcohol.

---

## **TOOTHPASTE CONTAINING PROPOLIS AND METHOD FOR PRODUCING THE SAME**

**JP2005082592**

**PROBLEM TO BE SOLVED:** To provide toothpaste capable of giving a mild feeling in brushing the teeth, without using additives, such as a synthetic surfactant, a colorant, and an antiseptic, capable of preventing a touch of food in the mouth from being changed, even when the food is taken immediately after the teeth are brushed, and effective for preventing and treating pyorrhea alveolaris and gingivitis, inhibiting a mouth odor, and preventing tooth decay, or the like, by using high-purity propolis and making the propolis exhibit antibacterial, bactericidal, and anti-inflammatory actions among actions of the propolis. ; **SOLUTION:** The toothpaste containing the high-purity **propolis** is obtained by mixing ordinary water as a solvent 1 with glycerol and sorbitol as humectants 2 to prepare an aqueous solution, mixing xanthan gum and carrageenan as binders 3 with calcium carbonate as an abrasive 4 to prepare a powdery raw material, then kneading the aqueous solution with the powdery raw material to prepare a kneaded material, and further mixing menthol and a spearmint oil as flavors 5, and an extract of the high-purity propolis into the kneaded material. Thus, the toothpaste containing the high-purity propolis to which no synthetic surfactant, nor foaming agent, nor antiseptic, nor perfume is added is provided. Therefore, the toothpaste gives a refreshing feeling in brushing the teeth, without deteriorating a taste of the food, kills periodontal bacteria and intraoral various bacteria, and prevents the pyorrhea alveolaris, the gingivitis, and the like.

---

## **Medicament for treating otitis medis**

**CN101214287**

The present invention discloses a medicine for curing tympanitis, which is made from the following components with the weight portions: 1 to 3 portions of **borneol**, 4 to 6 portions of **globeflower**, 3 to 7 portions of **forsythia fruit**, 2 to 4 portions of **creat** and 3 to 5 portions of antibiotic. The present invention has the advantages of scientific prescription and mixed application of refreshing the mind, clearing away heat and alleviating pain by borneol; removing heat and toxic substance by globeflower; relieving swelling, resolving masses and cooling the blood by forsythia fruit and creat; and the western medicine antibiotic, thus producing quicker results. The present invention with abundant raw materials, low price, simple preparation and good curing effect has cure rate of ear internal pyorrhea, secretory otitis media, ear pain and other diseases up to more than 96 percent.

---



**Your Support Maintains this Service --**

**BUY**

*The Rex Research Civilization Kit*

**... It's Your Best Bet & Investment in Sustainable Humanity on Earth ...**  
**Ensure & Enhance Your Survival & Genome Transmission ...**  
**Everything @ [rexresearch.com](http://rexresearch.com) on a Thumb Drive !**

**[ORDER PAGE](#)**

---