

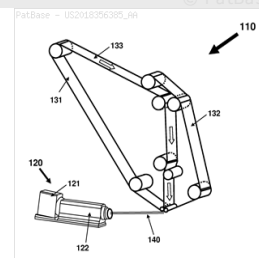
1) Family number: 66084282 (US2018356385A)

METHOD AND APPARATUS FOR MEASURING INFLORESCENCE, SEED AND/OR SEED YIELD PHENOTYPE

Abstract: Source: US2018356385A The invention relates to a method and apparatus for measuring inflorescence, seed and/or seed yield phenotype of a plant. More particularly, the invention relates to a method and apparatus for high throughput analysis of inflorescence, seed and/or seed yield phenotype of a panicle-like bearing plant.

Probable Assignee: BASF SE

Earliest Publication Date: 20170615



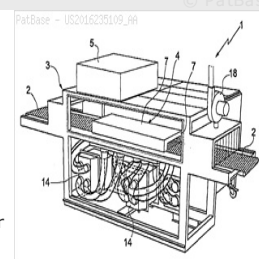
2) Family number: 58864657 (US2016235109A)

APPARATUS AND METHOD FOR DRYING AND/OR TREATING LOOSE FOOD PRODUCTS

Abstract: Source: US2016235109A An apparatus and a method of drying and/or treating loose products such as food products, for example corn, flour, seeds in general, spices, tea and coffee, dried pulses, dried or shelled fruit, like hazelnuts, dry food products in general, such as dried mushrooms, etcetera, the treatment which the aforementioned loose products can be subjected to being of the type such as disinfestation, sanitization, pasteurisation, sterilisation, etcetera, wherein the aforementioned apparatus comprises a conveyor for the loose products, a treatment unit defining a treatment chamber, means for generating radio frequency electromagnetic radiation, means for applying radio frequency electromagnetic radiation and/or microwaves which act in the treatment chamber or area and designed to affect the loose products transported through the treatment chamber or area, mixing means for the loose products to be treated arranged in the treatment chamber.

Probable Assignee: STALAM S P A

Earliest Publication Date: 20150328



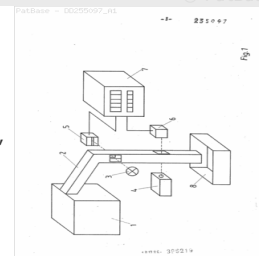
3) Family number: 5938328 (DD255097A)

VORRICHTUNG ZUM SORTIEREN VON PFLANZENSAMEN NACH IHRER DICHTHE
DEVICE TO SORT OF PLANT SEEDS ACCORDING TO THEIR DENSITY (MACHINE TRANSLATION)

Abstract: Source: DD255097A [Source: Claim 1] 1. Vorrichtung zum Sortieren von Pflanzensamen nach ihrer Dichte, dadurch gekennzeichnet, dass sich an einer Transportvorrichtung fuer Saatgut oder andere koernige Schuettgueter ein erster, an sich bekannter Detektor zur Bestimmung der mechanischen Abmessungen des Samens, ein zweiter, an sich bekannter Detektor zur Ermittlung der Absorption einer bestimmten elektromagnetischen Strahlung durch den Samen mit einer gegenueberliegenden Strahlenquelle und eine Auswerte- und Zaehleinheit befinden. [Source: claim 1] 1 device to sort of plant seeds according to their density, characterized by the fact that there are still a first, itself known detector for the determination of the mechanical dimensions of the seed, a second, itself known detector to determine of the absorption of a specific electromagnetic radiation through the seeds with an opposite source and an evaluation and counting unit in a transportation device for seed or other granular bulk materials.

Probable Assignee: INGBUERO DER VVB SAAT U PFLANZ

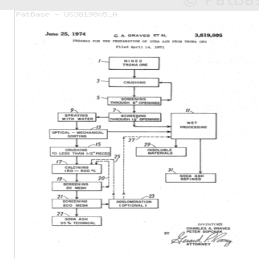
Earliest Publication Date: 19880323



4) Family number: 1081006 (US3819805A)

PROCESS FOR THE PREPARATION OF SODA ASH FROM TRONA ORE

Abstract: Source: US3819805A ABSTRACT OF THE DISCLOSURE A process for beneficiating trona ore for producing soda ash, which comprises crushing the ore, separating the ore by optical-mechanical sorting means, recovering the desired trona ore fraction and converting said beneficiated fraction to soda ash by calcination. Naturally occurring trona is found in Wyoming and other parts of the world. The trona deposits in Southwestern Wyoming are found at a depth of 900 to 1800 feet and often consist of a main stratified trona bed which may be from 7 to 13 feet thick, together with other beds of smaller thicknesses. The trona strata consist mainly of sodium sesquicarbonate ($\text{Na}_2\text{CO}_3 \cdot \text{NaHCO}_3 \cdot 2\text{H}_2\text{O}$) containing about 4 to 15% by weight of insoluble impurities comprises oil shales, shortite ($\text{Na}_2\text{CO}_3 \cdot 2\text{CaCO}_3$), and miscellaneous sedimentary materials, so that the percent of insoluble impurities varies throughout the trona bed. In the typical trona bed the strata are of distinguishably different colors, which for convenience we characterize as white, tan, green, gray and black. Many industries, such as the glass industry, which is a major consumer of dense soda ash, do not always require a highly refined grade soda ash (greater than 99 percent basis sodium carbonate). Primarily, the glass industry requires a soda ash of consistent purity having a bulk density greater than about 50 lbs. per cubic foot. Furthermore, the industry requires a soda ash which will not dust, is freeflowing, and has a particle size which makes it compatible with the sands used. Free-flowing soda ash is required to facilitate handling and to adapt it to automatic weighing equipment. There must be little or no dusting during addition of the soda ash to the melting furnaces, as dust tends to transfer to the furnace checker work causing a decrease in furnace life. In the manufacture of clear glass, the major raw materials other than soda ash are feldspar, nephelite, sand and lime, which are substantially the same impurities associated with crude trona. However, soda ash from crude unbeneficiated calcined trona cannot be used in the glass industry because the impurities vary and products of consistent quality cannot be obtained. Various methods have been used to obtain dense soda ash from crude trona. In a sesquicarbonate process producing soda ash, mined trona is crushed to about 8 mesh and dissolved in a hot recirculating trona mother liquor carrying more normal carbonate than bicarbonate so that the sodium carbonate and bicarbonate in the mined trona are both dissolved. The insoluble material is settled out (6) of the solution in clarifiers and the solution polished by filtration. Sodium sesquicarbonate is crystallized and separated from the hot solution, then calcined to soda ash. The mother liquor remaining after the



crystallization can be recycled to the dissolving tanks to dissolve more crude 6, trona and/or a portion of the mother liquor is passed to the crystallizers to form a second crop of sodium sesquicarbonate crystals. This processing route contains several drawbacks. There is the need for maintaining the carbon-ate-bicarbonate ratio in the recycling mother liquor, and 7 the relatively low concentration of salts per unit of solution entails the use of costly large scale processing equipment to recover the sequicarbonate. Sequestrants are required to facilitate filtration, and crystallizing aids are used to provide particles of the desired size and shape. These additives may contaminate the product. Furthermore, the processing equipment required substantially adds to the cost of the final product. See for instance U.S. Pats. Nos. 2,346,140; 2,639,217; 2,798,790; and 3,028,215. In the usual monohydrate route to soda ash the mined trona is crushed, calcined, dissolved in an aqueous solution, clarified and filtered. The clear filtered solution is then evaporated to form sodium carbonate monohydrate crystals which are separated from the mother liquor. This mother liquor may be recycled to the crystallizers or a portion may be returned to dissolve more calcined trona. The monohydrate crystals are then calcined to dense ash. This route for producing soda ash for use in glass manufacture has some drawbacks, among them being the heavy evaporation load with corresponding high capital cost for evaporative equipment. Also, the substantial amounts of equipment required for this type of process adds to the cost of the final product. See, for instance, U.S. Pats. Nos. 2,343,080; 2,343,081; 2,962,348; 3,131,996 and 3,260,567. Another method for the processing of trona includes the preparation of anhydrous sodium carbonate by maintaining the crystallization temperature in the crystallization units above about 1090 C., which is the transition temperature at which anhydrous sodium carbonate is formed as the stable crystal phase. See U.S. Pat. No. 2,770,524. Still another method involves the preparation of sodium bicarbonate which in turn may be calcined and converted to dense sodium carbonate. This type of procedure is disclosed in U.S. Pat. No. 2,704,239. In all of the above processing techniques there is involved dissolution, clarification, filtration and crystallization procedures requiring substantial amounts of complicated equipment which substantially add to the cost of the final product. An object of the present invention is to provide a process for the beneficiation of trona ore. Another object of p this invention is to provide a simple and inexpensive process for the production of soda ash of consistent quality from crude trona. A further object of the present invention is to provide a simplified process for the production of a technical grade of soda ash of adequate purity (greater than 95 percent basis sodium carbonate) to meet the needs of the glass industry. A still further object of the present invention is to provide a process for the production of soda ash of consistent quality from crude trona with a minimum of equipment. It has now been found that the quality of natural trona, and particularly the presence therein of large or small amounts of insoluble matter, is related to the color of the trona in the stratified layers and, therefore, to the color or to the amount of reflectivity of the pieces of ore which are mined from such stratified beds. The white and tan fractions of natural trona, for instance, contain relatively little insoluble matter, whereas the black oil shale is almost entirely composed of insoluble matter. The light brown trona is of greater purity than the dark brown variety, but the green, and particularly the gray materials, contain substantially more insoluble matter as a rule than the brown. It can be seen then, that if the pieces of mined trona are selected by color, the purity of the soda ash obtainable therefrom can be selectively controlled. If, for example, the white, tan and light brown pieces are separated from the dark brown, green, gray and black pieces, and the former pieces are subsequently calcined, a dense soda ash of comparatively high assay and containing relatively little insoluble matter is obtained. It has also been found, surprisingly, that in general if trona ore is suitably crushed, and screened to separate the fines from the larger pieces of ore, the percentage of insoluble material in the fines will considerably exceed that contained in the larger pieces of ore. In other words, screening of such crushed ore results in considerable beneficiation, and as the particle size increases, the percent of insoluble material tends to decrease. Although the contaminating mineral shortite is essentially white, it is insoluble in water. By far the greater portion of this contaminant is removed by the screening procedure. In samples which were screened on an 8 mesh sieve, the percentage of insoluble material was found to be appreciably higher in the fines than in the coarser particles which remained on the screen. Only in the case of the brown-colored fraction has it been found that screening does not appreciably beneficiate the remaining trona. Essentially all of the insolubles of the brown trona fraction are finely dispersed in this thicker layered ore, hence screening of this crushed fraction does not substantially improve its quality. This disparity in behavior is explained by the fact that much of the insoluble material responsible for the darker colored fractions of the ore, such as the gray and green fractions, occur as thin strata interleaved with the thicker ore layers. This thin, brittle material cleaves away and breaks up, in the mining and crushing steps, even though the contaminating shale contained therein is approximately equal in hardness to the trona. It has also been observed that when selected light colored trona is dissolved in water, either before or after the calcination step, the greater part of the remaining insoluble material was extremely light and colloidal in character. It therefore remains suspended in the saturated solution and may be removed by any one of the several conventional methods, as for example, that disclosed in U.S. Pat. No. 3,425,795. In the latter disclosure, finely divided trona ore is introduced into a crystallizer containing an aqueous slurry of water-insoluble impurities and sodium carbonate monohydrate seed crystals, said crystallizer being maintained at a temperature preferably between 92-97 degrees C. under non-evaporative conditions to crystallize the monohydrate. The product slurry from the crystallizer containing 30 to 60 percent suspended solids, primarily sodium carbonate monohydrate and insoluble material, is passed into a vertical columnar separator wherein the monohydrate crystals settle to the bottom of the separator and are removed, but the light colloidal insoluble impurities move upward with the flow of the mother liquor and are removed from the system. The present invention relates to a process for the beneficiation of trona ore which comprises: a. mining the trona ore; b. crushing the mined trona; and c. beneficiating the selected fractions of ore by optically sorting the ore according to a variable standard of reflectivity, transmission or absorption of electromagnetic radiation of selected wavelength or wavelengths, or to a variable standard of fluorescence, resulting from excitation of the surface of the ore, induced by any selected wavelength or wavelengths or said radiation, in such a manner that the ore is thereby divided into two fractions, one of which has the quality desired. The quality of the beneficiated trona ore obtained by the above procedure varies with the color standard chosen. Thus, when the pieces selected are limited to those which may be classified as white, tan or light brown, the soda ash obtained therefrom, merely by calcining, would normally be found to assay greater than 95 percent, usually 98 percent or more, sodium carbonate. Such high grade material on the average will constitute about 60 percent or more of the trona ore in the mined face. Increased yields can be obtained by slightly varying the standard of selectivity to give a technical grade of soda ash assaying about 95 percent Na₂CO₃, which grade may be suitable for the manufacture of glass as well as for the many other uses of technical grade soda ash. According to the present invention, trona ore is mined by conventional techniques and then crushed into pieces which are roughly 6 inches in diameter or less. The fines including all pieces less than 1/2 inch in diameter, preferably less than 1 1/2 inches in diameter, are removed from that portion which is to be further processed according to this invention. The selected pieces, which now vary between about 1/2 inch and 6 inches in diameter, are wet with an aqueous solution, such as water or a solution containing dissolved trona or sodium carbonate in order to define more distinctly the desired optical characteristics of the trona ore by reducing light scattering from its surface, thereby sharpening the contrast between the darker and lighter colored pieces, and by rinsing away the usual mask of adhering dust. It has been found that the wet pieces vary in color from white to black through shades of light to dark brown, green and gray. The separation or classification of the desired trona ore fractions, by optical sorting means, according to color or reflectivity can be done either by visual selection or optical/mechanical means. Photoelectric sorting is not new, and there are devices on the market wherein an illuminated object can be scanned by a photoelectric cell which then activates means for classifying the article by color or by the degree of reflectivity. Such optical sorting devices have been found suitable for separating a relatively pure ore fraction where its color, its reflectivity or its fluorescent response to ultraviolet light bears a relationship to the relative purity of the material. For instance, if it is determined that the white and/or light brown fractions are to be retained for further processing by the method of this invention, the dark brown, green, gray, black or any intermediate shade fractions are removed and may be combined with the fines and processed to soda ash by one of the aforementioned conventional processing means. The separation of these white and/or light brown fractions from the remainder of the material by optical sorting permits the recovery of relatively pure trona ore by correlation of the reflectivity of the ore to its relative purity. The discriminating element may be sensitive to reflected, transmitted (or the partial absorption of) electromagnetic radiation, or to the nature of any fluorescence which results from the impingement of such radiation on the piece or pieces of trona ore. Preferably, the ore is illuminated by ultraviolet or visible light and the illuminated piece is scanned by a photoelectric device which responds to the color, fluorescence, and/or the degree of reflectivity of the ore. This response activates mechanical means for separating the desired fraction such as the white and light brown pieces, from the dark brown, f5 green, gray and black, or makes any other predetermined selection, so that the white and light brown pieces are accepted for further processing according to the method of this invention. The remaining darker colored pieces are set aside generally for combination with the

the method of this invention. The remaining darker colored pieces are set aside generally for comminution with the fines, as previously mentioned, and then processed by conventional wet processing means to produce a better-than-technical grade of soda ash. The selected fraction such as the white and light brown pieces are crushed so that all particles are now less than 1/2 inch in diameter, then this crushed trona fraction is calcined at temperatures between 150° and 500 degrees C. The calcined trona, which is now sodium carbonate or soda ash, is then screened to removed fines and the product which is recovered has a particle size between about and 200 mesh (Tyler). The particles remaining on a mesh screen are generally returned to the calciner or crushed and then screened. The fines passing through the 200 mesh screen may be reconstituted and returned to the process. The final free-flowing dense soda ash with the fines removed constitutes the technical grade soda ash containing at least about 95 percent sodium carbonate, which generally meets the requirements of the glass industry. Reference is made to the figure which illustrates diagrammatically one way in which the process of this invention may be employed. Referring to this figure, trona ore 1 as received from the mine is crushed into small pieces in crusher 3 to such size as to pass through screen having six inch openings or through perforations approximately six inches in diameter. Any pieces remaining on screen 5 are returned to crushing operation 3 for further crushing and recycled back to screen 5. Pieces passing screen 5 continue on to screen 7 having perforations of from 1/2 to 2 inches, preferably about 1 1/2 inches. The fines and small pieces passing through screen 7 are directed to a typical wet process system 11 wherein they may be treated according to any of the aforementioned established processes. The high grade trona ore fraction selected for further processing by the method of the present invention (wherein the trona ore pieces now vary between about 1 1/2 inches to 6 inches in diameter and are of various colors and shades), pass to sprayer 9 wherein the ore surfaces are wetted with an aqueous solution to define more distinctly the optical differences among the lumps of ore. Next, the pieces pass through an optical-mechanical sorting means 13, such as the Sortex optical separators Model Nos. 711M and 8t1M (manufactured by the Sortex Co. of North America Inc., Lowell, Mich.). Other sorting devices which may be used are disclosed in U.S. Pat. Nos. 3,066,797 and 3,305,089. mesh screen are passed to screening operation 21 at which point the fines which are in the order of 200 mesh or less may be diverted either to the wet processing operation 11 via line 27 or agglomerated at 23 preferably by the use of water or carbonate solution, then recycled via line 25 to calciner 17. Screens 19 and 21 will, of course, be chosen so as to provide a screen size to suit market requirements. The material remaining on screen 21 constitutes the 95 percent technical grade soda ash product. By far the greatest part of the insoluble matter in the original mined trona is diverted to the wet processing unit 11 as a result of the beneficiation obtained in the screening step 7 and the further beneficiation obtained by the optical-mechanical sorting means 13. By working up these crude materials by conventional methods 11, the insoluble material is discarded at 29, and the final product 31, while of higher purity, is more costly than that desired by the glass industry. In order to better understand the operation of the present invention, the following examples are offered. EXAMPLE 1 A 6.4 kilo composite sample of mined raw trona varying in color from white through gray to brown is divided by screening into seven fractions by size. The first fraction having too few lumps, too disparate in size to permit a meaningful sort, and the seventh consisting of unsortable fines. These seven fractions are characterized by number, size, and screen size as follows: TABLE I Fraction number 1 2 a 4 5 6 7 Range, particle size, in (1) 0.63-1. 04 0.37-0. 62 0. 26-0.36 0. 13-0. 25 0.06-0. 12 (2) Percent by weight ----- 3.40 6.49 21.57 0.65 17.44 13.89 27.56 1 1.05" and larger. 2 0.06" and smaller. In a typical operation, the particles to be sorted are drawn from a storage hopper by a vibrating feeder which then delivers them to a vibrating accelerating chute on their way to a rotary aligning disc. The particles are aligned on this disc in single file and are discharged into the V trough of the feed conveyor belt system for separate delivery at uniform speed to the particle inspection unit. This inspection unit may comprise an optical chamber in which the particles are inspected by three camera units while strongly illuminated. At this stage, the machine determines whether a given particle should be accepted in the main stream or diverted to the wet processing operation 11. This diversion is accomplished, for instance, by blasts of air from high speed air valves, whereupon the resulting two product streams are separated by a dividing edge. The optical sorting device is preadjusted to accept only the trona fraction which will give the desired quality soda ash product. Preferably, for producing technical grade ash, the white and/or light brown colored fractions are recovered. Various color comparison standards can be used in the device, and its sensitivity may be adjusted to permit the acceptance of lighter or darker colored material. The final sensitivity adjustments will be based on the chosen analytical standard for the final technical soda ash product and also on the percentage of the total quantity of mined trona which is acceptable for the production of this technical grade material. Obviously, as the quality of the beneficiated product is increased, the fraction of the material diverted to this use is diminished, and the fraction of the trona not acceptable for this method of processing which is diverted to the usual wet processing methods is increased. The accepted pieces leaving the optical sorter 13 are crushed in crusher 15 to 1/2" in diameter or less, then calcined to convert the ore to sodium carbonate by passage through a calcining furnace 17. Since a free-flowing product is required by the glass industry, the calcined material passes through screen 19 for removal of coarse particles over 20 mesh, which may be returned to the calciner 17 via line 20. The particles passing through the An aliquot portion of fraction No. 2 is then visually sorted, first dry, then wet, using the color of brown kraft wrapping paper as a standard for the "brown" sort. A distinction is also made between gray and white pieces, thus dividing the original aliquot portion into three groups according to color. The percent of insolubles in each of these groups is then determined by dissolving the selected pieces of each group in water, filtering, then drying and weighing the insoluble residue which remains. The results are recorded in Table II below: TABLE II Percent Wet sorting Dry sorting Weight Weight dis-tribu- distribu Fraction number 2 tion Insolubles tion Insolubles "Brown" ----- 15.61 19.89 13.59 22.68 "Gray" ----- 21.93 6.66 15.24 7.

Probable Assignee: HENLEY GROUP INC 11255 NORTH TORREY PINES RD LA JO

Earliest Publication Date: 19740625

5) Family number: 4882264 (GB1540793A)

STARCH-CONTAINING EDIBLE SUBSTANCES

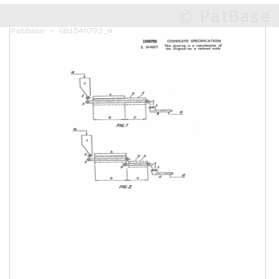
Abstract: Source: GB1540793A [Source: Claim 1] 1. A method of thermally treating a starch-containing edible substance such as cereal, pulses or oil-seeds by action of an electromagnetic oscillation in the form of ultra-short waves or infra-red radiation, said method comprising: heating the substance, in a first stage, for 5 to 120 seconds, from the ambient temperature to a temperature of between 100° and 200°C; in a second stage maintaining the temperature of the substance for 5 to 200 seconds at the temperature reached in the first stage or at a temperature gradually increasing up to not more than 220°C and/or at a temperature gradually decreasing by not more than 60°C, the change of temperature in the fist stage being controlled by the intensity of the infra-red radiation or of the electro-magnetic waves of a wavelength of 0.7 to 0.1m crushing or flocculating the substance when hot; and then cooling the substance down to below 40°C.

Probable Assignee: CESKE VYSOKE UCENI TECH V PRAZ

Earliest Publication Date: 19790214

6) Family number: 60282986 (DE102014003445A1)

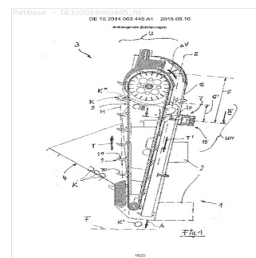
VERFAHREN UND VORRICHTUNG ZUR ERFASSUNG DER VEREINZELUNG VON KARTOFFELKNOLLEN IN LEGEMASCHINEN SOWIE AN DEREN FOERDERER VORGESEHENER MITNEHMER METHOD AND APPARATUS FOR DETERMINING SINGULATION OF POTATO TUBERS IN LEGE MACHINES AS WELL AS THEIR PROMOTERS INTENDED MITNEHMER (MACHINE TRANSLATION)



Abstract: Source: DE102014003445A1 Bei einem Verfahren zur Erfassung und Bewertung eines Vereinzelungszustands von Pflanzgut ist vorgesehen, dass fuer einen Verlegevorgang in einer Ackerfurche bereitgestellte Kartoffelknollen oder aehnliches grossvolumiges Stueckgut detektiert wird. Dabei ist eine dem Verlegevorgang vorausgehende Vereinzelungsphase der Kartoffelknollen zu bewerten. Das erfindungsgemaesse Konzept geht davon aus, dass die im Bereich eines Foederers in einer Kartoffellegemaschine verlagerten Kartoffelknollen entlang zumindest einer ein elektromagnetisches Strahlungsfeld aufweisenden Messzone gefuehrt werden. In dieser Zone ist eine Fuehler-Vorrichtung vorgesehen, die eine getaktete digitale Signalerfassung mittels zumindest einer optischen Sensorbaugruppe mit LED-Beleuchtung aufweist. Damit wird zumindest aus einer Bewertung von mit einer zwangsweisen aenderung der Bewegungsrichtung und/oder des Bewegungszustandes weitergeleiteten Kartoffelknollen ein fuer den Foeder- und Verlegevorgang nutzbares Steuersignal erzeugt. In a method for detecting and evaluating a separation state of seedlings it is provided that for a laying operation in a furrow provided potato tubers or similar large-volume cargo is detected. Here a the laying process prior separation stage of potato tubers should be evaluated. The inventive concept assumes that the displaced in a Potato planter in the area of a conveyor potato tubers are guided along at least one of an electromagnetic radiation field having measurement zone. In this zone, a sensing device is provided which comprises a clocked digital signal acquisition means of at least one optical sensor module with LED lighting. In order for a for the conveying and laying operation usable control signal is generated from at least a review of forwarded with a forcible change of the movement direction and / or the state of motion potato tubers.

Probable Assignee: GRIMME LANDMASCHF FRANZ

Earliest Publication Date: 20150910



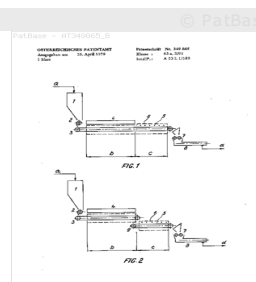
7) Family number: 1197713 (AT349865B)

VERFAHREN FUEHRE EINE ZWEISTUFIGE, THERMISCHE AUFBEREITUNG VON KOERNERN UND EINRICHTUNG ZUR AUSFUEHRUNG DIESER VERFAHRENS PROCEDURE FOR A TWO-STAGE, THERMAL PROCESSING OF GRAINS AND DEVICE FOR CARRYING OUT THIS PROCESS (MACHINE TRANSLATION)

Abstract: Source: AT349865B [Source: Claim 1] 1. Verfahren fuer eine zweistufige, thermische Aufbereitung von Koernern durch Einwirkung elektromagnetischer Wellen im Ultrakurzwellenbereich oder durch Infrarotstrahlung, dadurch ge- kennzeichnet, dass die Koerner in der ersten Stufe 5 bis 120 s aus der Umgebungstemperatur auf 100 bis 200 C durch Infrarotstrahlen oder elektromagnetische Wellen mit einer Wellenlaenge von 0, 7 bis 1, 0 m erwarmt werden und in der zweiten Stufe waehrend 5 bis 200 s bei der in der ersten Stufe erzielten <Desc/Clms Page number 4> Temperatur oder bei einer Temperatur, die maessig maximal um 10 percent erhoeht ist belassen werden und/oder bei einer Temperatur, die allmaehlich bis auf maximal 60 C gesenkt wird, dass der Temperaturverlauf in der ersten Stufe durch Einstellen der Intensitaet der Infrarotstrahlung oder der elektromagnetischen Wellen mit einer Wellenlaenge von 0, 7 bis 0, 1 m geregelt wird und in der zweiten Stufe der Temperaturverlauf erhalten bleibt oder durch Infrarotstrahlung oder elektromagnetische Wellen mit einer Wellenlaenge von 0, 7 bis 0, 1 m oder vorzugsweise durch eine elektrische Widerstandsheizung und/oder eine Waermeisolation aufrechterhalten wird, worauf die Koerner in heissem Zustand zerquetscht oder geflockt und auf eine Temperatur unter 400C abgekuehlt werden. [Source: claim 1] 1 procedure for a two-stage thermal treatment of grains through exposure to electromagnetic waves in the field of ultra short wave or by infra-red radiation, thereby, features, that the grains in the first stage 5 to 120 seconds from the ambient temperature 7 to 1, to 100 to 200 C by infrared rays or electromagnetic waves with a wavelength of 0, 0 m are heated and in the second stage, while 5 to 200 s at the first stage achieved <desc/clms page number 4> Temperature or be left at a temperature that is moderately maximum increased to 10 percent or at a temperature which will be reduced gradually up to the maximum of 60 C that the temperature gradient in the first level by adjusting the intensity of infrared radiation or electromagnetic waves with a wavelength of 0, 7-0, 1 m is governed and in the second stage, the temperature gradient is maintained or through infrared radiation or electromagnetic waves with a wavelength of 0, 7-0, 1 m or preferably by an electric resistance heater and/or a heat insulation is maintained, what the seeds in hot be crushed or flocked, and cooled to a temperature of 400 C.

Probable Assignee: CESKE VYSOKE UCENI TECH

Earliest Publication Date: 19780915



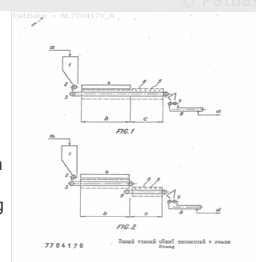
8) Family number: 4919657 (NL7704170A)

WERKWIJZE EN INRICHTING VOOR HET IN TWEE TRAPPEN THERMISCH BEHANDELEN VAN KORRELVORMIGE ZADEN BEVATTENDE VRUCHTEN. HEAT TREATMENT OF GRANULAR FRUIT SEEDS - WITH PRECISE CONTROL OF HEATING RATE, TEMPERATURE AND DURATION (OE 15.9.78)

Abstract: Source: NL7704170A Fruit contg. granular seeds is fed via a hopper and regulating feeder into an oven. The fruit passes through the oven on a belt or vibratory transporter and is heated by means of ultra-high frequency electromagnetic waves or infra-red radiation to the desired temp. It then passes through a second chamber in which the temp. is maintained. This chamber is insulated and equipped with sec. heating which may be similar to the heating system in the first chamber, or, as pref. resistance heaters. The treated fruit then passes through a crushing or rolling device into a cooler and thence to storage or subsequent treatment. The best treatment for each type of fruit is predetermined experimentally and then the temp. to which the fruit is heated in the first section is adjusted by varying the intensity of the radiation or by switching it on and off, and the duration of each stage is varied by adjusting the feed rate and length of travel through each section. The system enables the rate of heating, duration of treatment and temp. to be precisely regulated according to the nature of the fruit being treated. The result of this is an improved final content of digestible protein and energy.

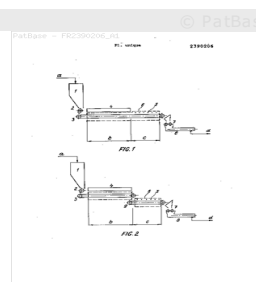
Probable Assignee: CESKE VYSOKE UCENI TECH

Earliest Publication Date: 19781017



9) Family number: 3678493 (FR2390206A)

PROCEDE ET INSTALLATION POUR LA PREPARATION THERMIQUE DE GRAINS EN DEUX ETAPES HEAT TREATMENT OF GRANULAR FRUIT SEEDS - WITH PRECISE CONTROL OF HEATING RATE, TEMPERATURE AND DURATION (OE 15.9.78)



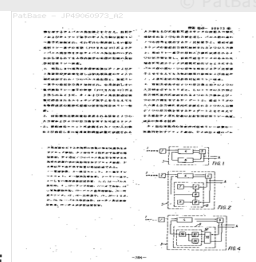
Abstract: Source: FR2390206A a. Procède pour la préparation thermique, en deux étapes de grains sous l'effet d'ondes électromagnétiques du domaine des ondes ultra-courtes, ou du rayonnement infra-rouge. b. Procède caractérise en ce qu'on chauffe d'abord les produits à 100-200 degrés C par ondes électromagnétiques et rayonnement infra-rouge et, après maintien à cette température, on l'abaisse progressivement à environ 60 degrés C, après quoi les produits en grains sont concassés ou aplatis et refroidis en-dessous de 40 degrés C. c. Procède applicable au traitement de céréales, légumineuses, et graines oléagineuses. Fruit contg. granular seeds is fed via a hopper and regulating feeder into an oven. The fruit passes through the oven on a belt or vibratory transporter and is heated by means of ultra-high frequency electromagnetic waves or infra-red radiation to the desired temp. It then passes through a second chamber in which the temp. is maintained. This chamber is insulated and equipped with sec. heating which may be similar to the heating system in the first chamber, or, as pref. resistance heaters. The treated fruit then passes through a crushing or rolling device into a cooler and thence to storage or subsequent treatment. The best treatment for each type of fruit is predetermined experimentally and then the temp. to which the fruit is heated in the first section is adjusted by varying the intensity of the radiation or by switching it on and off, and the duration of each stage is varied by adjusting the feed rate and length of travel through each section. The system enables the rate of heating, duration of treatment and temp. to be precisely regulated according to the nature of the fruit being treated. The result of this is an improved final content of digestible protein and energy.

Probable Assignee: CESKE VYSOKE UCENI TECH

Earliest Publication Date: 19781208

10) Family number: 4167440 (JP49060973A)

RADIOISOTOPE SS HORIZONTAL CONDUCTIVE RELAY DEVICE IEEE APPENDED CLAIMS, PLI STRING TO SEE THE IONIZING RADIATION, THE ELECTRICAL PULSE TO THE DETECTION, THE DETECTION ? AND THE UNICAST UNI, ELECTRICALLY COUPLED TO THE ELECTRONIC RELAY UNIT AND THE N, ONE OF THE OUTPUT SIDE AND THE ELECTRIC GENERATING AN IRREGULAR PULSE TRAIN DETECTION UNIT TO ONE INPUT CONTACT MEMBER 9AH; BT INCLUDING ONE OF THE INPUTS 1I1 BEFORE HAVING A T-R, T CHILD UNI, OLD IJ OF GURLEY II, THIS RATIO ", COMPARATIVE SOFT AROUND THE OUTPUT SIDE IS CONNECTED TO ONE INPUT OF THE ENTIRE APPARATUS 1 MOVING ? AND OUTPUT--ONE OF THE OUTPUT SIDE OF THE ELECTRONIC ARRAY DISPOSED YUNITSUTO + 7 BEFORE HAVING A RELAY DEVICE, A POWER SUPPLY UNIT CONTAINS THE N ELECTRON-RELAY THE INPUT SIDE OF THE TWO AND TWO OUTPUT SIDE HAS A ONE OF THE FREQUENCY THRESHOLD VALUE ELECTRICAL PULSE TRAIN CHARACTERIZED BY REGULAR THRESHOLD AND A NEGATIVE FREQUENCY SETTING UNIT FREQUENCY ? IN THE THRESHOLD APPARATUS OF ONE FOOT PUPIL INPUT 114 I1R1 RELAY ONE PREVIOUS FRONT-CONNECTED TO THE OUTPUT SIDE OF THE NEGATIVE OF THE THRESHOLD (FREQUENCY SETTING DEVICE ON THE COMPARISON OF THE OUTPUT OF THE FIRST INPUT-SIDE !! ON IS CONNECTED TO THE IRREGULAR AND THE REGULAR ELECTRICAL ELECTRICAL PULSE TRAIN, THE DIFFERENCE BETWEEN THE FREQUENCY OF FALSE STATE COLUMN YES BY "NO! THE STATES L, W IMAGE FIGURE 1 LE FARES, RADIOISOTOPE-MING IS DETAILED DESCRIPTION OF THE INVENTION RADIATION SYM.Z DO GET TIRED OF MASUOKA LAB., AND PARTICULARLY RELATES TO A PROPENSITY SHUENTEI VILLA ALSO HIT THE AC-ENGINE AND INDUSTRIAL !! 4FK1, AND THE FIRST ?" 2 TO 1 USED IN THE RADIOACTIVE ISOTOPE, THE ELECTRON-RELAY RELAY CLOSED. YOO-TOWN LINE N IN THE NEETS, ET AL., SELF ELECTRICAL PULSE, A DETECTION BY THE RING #39;UNI, 175,000 IS CONNECTED TO A ? MOTHER AND EARTH OR RECORDING RELAY DEVICE IS KNOWN (FOR EXAMPLE 1 T-[ISOTOPE) 1 AROUND THE LICHEN MOUND ACCEPTABILITY (CL COMMAND, OR A BOOK ON LIOA ETC .THETA.O C T (E8) ET AL ENGINEERING OT JL, XOR K.SUB.J' MOSCOW 4 STATION, T9B PUBLISHED REFERENCE). SUCH A RADIOACTIVE ISOTOPE, LAKE CITY I IJ ANALOG IMAGE IM INTEGRATION CHILD RELAY UNIT, A PATH NETWORK COMPOSED OF RE TO THE TOILET BOWL FOR SOWING SEEDS, AND THIS SIGNAL-PATH NETWORK RELAY DEVICE IS RE-BY VERY STABLE RESPONSE IS PREVENTED, IN THE CASE OF SMALL DIFFERENCE CONDUCTIVE ? ? END THRESHOLD: TSUKUDA 1- AND OPERATION OF HIGH RELIABILITY IS LOST. THIS CIRCUITRY ? RE RESPONSE OF THE DEVICE, TO LIMIT THE SCOPE VALUE CAN NOT SAY MORE THAN NECESSARY FORMAL NAME TONE, AND THE PRODUCTION SPEED AND RELIABILITY AND TO INCREASE THE RATIO OF THE DARKNESS IT IMPOSSIBLE TO V · SS. FINALLY, THE WIDE PERFORMANCE CHARACTERISTICS ARE REQUIRED, THE IMAGE USED IN THE #39;OF THE DEVICE BY PATH NETWORK CONFIGURATION IS COMPLICATED, AS A RESULT THE CONTROL TO A ? AND PROCESS AUTOMATION RADIOISOTOPE TO NARROW THE FIELD OF APPLICATION OF THE RELAY DEVICE. ACCORDINGLY, AN OBJECT OF THE PRESENT INVENTION HAS A THICKNESS THAT IS PRE-ADJUSTED, MADE OF A MATERIAL OF VARIOUS SHAPES. N IN LIQUID OR SOLID MATERIAL IN THE CONTAINER, IT IS POSSIBLE TO CONTROL THE LEVEL, A RADIOACTIVE ISOTOPE IT IS TO PROVIDE A RELAY DEVICE TO ANOTHER OBJECT OF THE PRESENT INVENTION PARTS AND A ARTICLE TRANSPORT MEANS AND MECHANISMS TO CONTROL THE MOVEMENT OF THE POSITION OF THE RADIOISOTOPE MAKES IT POSSIBLE TO RELAY INSTRUMENTATION FTH, IT IS TO PROVIDE A PURPOSE OF THE PRESENT INVENTION. YET ANOTHER FLUID DENSITY TO ENABLE THE CONTROL OF, A RADIOACTIVE ISOTOPE IT IS TO PROVIDE A RELAY DEVICE, THE ABOVE-MENTIONED OBJECT, THE # LINE I7, AN ELECTRON OF THE GURLEY UNI, SUPPLIED BY THE PULSE DETECTION UNIT 609 BY JP-A-49-116151 JP-73 (2), CONDUCTIVE LINE IS TO BOOK PEP TALK RADIOISOTOPE, AND THE RELAY DEVICE, THE ELECTRON-RELAY UNI, IRREGULAR DETECTION, TO PROVIDE UNI, ELECTRICAL PULSE TRAIN IS CONNECTED TO ONE INPUT1LLL @ INCLUDING A SEPARATE ONE OF THE INPUT, THE OUTPUT SIDE OF THE COMPARISON DEVICE AND THE COMPARISON DEVICE AND ONE CHARACTERIZED BY FREQUENCY THRESHOLD VALUE T (REGULAR AIR COLUMN @ ON THE THRESHOLD VOLTAGE OF THE FREQUENCY OF FALSE TO THE OUTPUT SIDE OF THE FOOT THAT EXTRA SATOSHI CONNECTED TO A RELAY DEVICE, AND A DEVICE FOR SETTING THE THRESHOLD INTERFERENCE WAVE NUMBER ? STATION TOTAL TWO INPUT-SIDE WHOLE OF THE OUTGOING CHARGED TSUKUDA, FISH PRESERVE 71-1 TO BECOME THE OUTPUT SIDE OF THE 1 LE ELEMENT CONNECTED TO THE OUTPUT SIDE OF THE ? TL. BLOOM AROUND RATIO ASSUMES THAT THE HUMAN POWER IS CONNECTED TO THE SACRAL ARE COMPARED BY ELECTRICAL PULSE TRAIN C AND REGULARITY IRREGULAR-LAW THE FREQUENCY RATIO OF THE ELECTRICAL PULSE TRAIN-LIKE JUKU YES BY S-SHAPED REALLY RS ARE NO SO AS TO OBTAIN A RADIOACTIVE ISOTOPE, A RELAY DEVICE BY THE PRESENT INVENTION IS ACHIEVED BY A GURLEY APPARATUS RADIOISOTOPE T + 7 OF THE WIDE RANGE OF THE DIFFERENCE BETWEEN THE LINES OF THE WASTE, A HIGH DEGREE OF RELIABILITY FOR .PHI.1 SPEED AND THE POWER SUPPLY VOLTAGE, A WIDE AMBIENT TEMPERATURE RANGE AND THRESHOLD VARIATIONS YASUSHI CAPE RELEASE FORCE CAN BE ADJUSTED IN A WIDE RANGE, IT!, AND THE RESPONSE AND RELEASE ELECTRIC) VALUE. OR LESS, THE SURFACE OF THE HIGH STABILITY OF THE (9) IN THE EMBODIMENT SHOWN IN THE DETAILED DESCRIPTION OF THE PRESENT INVENTION WITH REFERENCE TO THE RELAY DEVICE OF THE PRESENT INVENTION, RADIOISOTOPE # # (CONDUCTIVE SOURCE 1 FIG. 1) WHICH IS THE SEPARATING LINE RECORDING CONVERTS IT TO ELECTRICAL PULSE SUPPLIED TO THE ELECTRON-RELAY, DETECTION UNIT 3 UNICAST. 11C II IN THE EXAMPLE DESCRIBED HERE, M SOURCE IN A LS POWER, GAMMA RADIATION, OTHER IT IS ALSO POSSIBLE TO USE ?, THE INDIVIDUAL ELECTRONIC UNIT 3A (INJECTION) RATIO AND LET SLEEPING DOGS LIE AROUND



THE COMPARISON DEVICE IS COUPLED TO ONE OF THE RELAY DEVICE ON THE OUTPUT SIDE (THE S COMPARISON DEVICE 14I OF ONE OF THE INPUT ELECTRICAL PULSE FOR GENERATING A SERIES OF L [UNICAST IRREGULAR DETECTION, THE ELECTRON-RELAY UNIT 3 IS CONNECTED TO THE REGULAR ELECTRICAL PULSE SIGNAL IN THE THRESHOLD VOLTAGE OF THE WAVE NUMBER OF THE STATION DEVICE 4 FOOT BU. TO TAKE ON FOOT DEVICE IN TWO FREQUENCY VALUE, THE TWO INPUT-SIDE CONDUCTIVE OF THE PRESENT INVENTION. A ? IS THE OUTPUT SIDE OF THE RELAY, THE RELAY CONTACT @ TO THE OUTPUT 1 PASS ELEMENT S 1 LE OF THE OUTPUT O OF THE DEVICE 7 BY THE ARROW A II VIEW SHOWN. COMPARISON DEVICE SETTING DEVICE 60 OF THE OUTPUT SIDE OF THE INPUT IS CONNECTED TO THE BLUE-GREEN ALGAE FOLLOW WITH THIS CONFIGURATION, AS SHOWN IN FIG SPEAR! RELAY APPARATUS, COMPARED TO THE IRREGULAR PULSE TRAIN) (THE FREQUENCY OF THE REGULAR COLUMN IN THE Y-WAALS THE RATIO OF EA #39;DUST-LIKE A NO-LIKE SCHOOL, ALSO BECOME ONE OF THE RADIOISOTOPE, THE RELAY APPARATUS OF EMBODIMENT, SPEAR L FREQUENCY THRESHOLD VALUE SETTING UNIT, ONE OF THE GENERATOR 7 (B STEALTH? T (1). WHEN THE INPUT SIDE AND THE OUTPUT SIDE 1 HAVING A ONE-KAI-NUMBER OF AND CIRCUIT Q, AND, ONE OF THE INPUT 91, AND ONE OF THE OUTPUT 90R CIRCUIT I11 / L A COMMON (BLOOM). IN THE SHOT AT OUTPUT 111 PULSE GENERATOR 111, THE AND CIRCUIT 7J? ONE + IS CONNECTED TO THE INPUT SIDE THE OUTPUT SIDE OF THE PULSE GENERATING DEVICE T AND CIRCUIT 10 ONE INPUT OF THE AND CIRCUIT 111 IS CONNECTED TO THE OUTPUT OF THE 9. A I #! 835A R / L IO1 CONNECTED TO THE OUTPUT SIDE OF THE OUTPUT OF AN OR CIRCUIT (L / LJ IS THE RATIO S2-TO-INPUT 111 IS CONNECTED TO THE NINE OR MORE OF THE AND CIRCUIT 9A@L.H +) SEPARATE RAKE ELEMENT J IS CONNECTED TO THE OUTPUT SIDE OF THE PULSE GENERATOR 7 ON THE OTHER HAND, THE RELAY DEVICE S OF STATE (YES OR NO) TO THE CORRESPONDING FREQUENCY THRESHOLD A #39;HAVING A PAG-E: 2, IN THE DESCRIBED IN THE EMBODIMENT OF FIG. 3, THE DETECTION UNIT IS COUPLED TO THE PULSE SHAPING AMPLIFIER / S / 2 INCLUDING CONDUCTIVE RAY DETECTOR COMPARATOR IS REVERSIBLE. HONG, INDIVIDUAL INDUCTOR THE SAME COUNTER L / 3, AND THE COMPARATIVE ELEMENT 6 / Q / 6 REVERSIBLE COUNTER J IS DETERMINED BY THE NUMBER OF THE NUMBER REQUESTED STORAGE VOLUME / S, T / A COMPARATIVE ELEMENT OF THE DIFFERENCE BETWEEN THE NUMBER OF PULSES, TO DETECT ONE CODE TO THE COMPARATIVE ELEMENT 1 TO THE INPUT SIDE OF ONE OF THE AMPLIFIER / IS CONNECTED TO THE INPUT SIDE OF THE CIRCUIT // REFLECT CAREFULLY 835A IS CONNECTED TO THE OUTPUT OF THE COMPARATIVE ELEMENT Q / S (ILLI REVERSIBLE COUNTER / 9J, IS CONNECTED TO THE INPUT, EASY OCCURS IS UNCLEAR, THE COUNTER WHEN THE OPERATION OF THE / Q IN ORDER NOT INPUT L / 6 OF THE COMPARATIVE ELEMENT L1L, IS A REVERSIBLE COUNTER / CONNECTED TO THE OUTPUT SIDE OF THE OUTPUT SIDE OF THE COMPARATIVE ELEMENT 6, THE TRIGGER / IT IS CONFIGURED AS A RELAY DEVICE IS CONNECTED TO THE INPUT OF THE COMPARATIVE ELEMENT TSUKUDA IK 15 TRIGGER CIRCUIT HAVING TWO INPUTS, AND ONE OF THE INPUT SIDE / 7 AND ONE OUTPUT ONE OF THE GDL AND THE GATE CIRCUIT OF THE GATE CIRCUIT 111, THE INPUT 1 INPUT I11 AND TRIGGER CIRCUIT AND IS CONNECTED IN PARALLEL WITH THE EDGE SIDE OF FIG. 1 SHOWS A CAPACITOR / DIODE 19-I, AND THE RESISTANCE OF THE OTHER CALL, URINE, MAY THE GATE OF THE CAPACITOR 21 AND THE DIODE N-I AND RESISTANCE FORCE RATIO F ELEMENT 76. ONE OF THE INPUT EVALUATION HAVING A TWO OF THE INCOMING TRIGGER 771, 411 AND ONE OF THE TWO OUTPUT 1! TREE WITH AND 1, THE GATE INPUT SIDE OF THE INPUT SIDE AND THE OUTPUT TRIGGER II J IN PARALLEL IT IS A WEAK ONE SLAVE 6 GATE AND THE RESISTOR CAPACITOR 5, A DIODE 27, THE GATE EASY TSUKUDA, A DIODE CAPACITOR AND (H U 2Q WITH A DIODE RESISTOR 30. GOLD. TOM, UTAH LAKE-S". (ELEMENT 1J IS CONNECTED TO THE INPUT SIDE (N.F.F. PULSE GENERATOR 72 IS A PULSE SHAPING CIRCUIT 3 / IT, 32-TN, THE CAPACITOR JJ, VARIABLE RESISTOR 3, V3, JA μ AND FREQUENCY SETTING AND P ID. TO USE RENAL CIRCUIT Q, TRANSISTOR 37, RESPECTIVELY, THESE JJ DICE THE COLLECTOR OF THE TRANSISTOR, THE RESISTOR 39 IS CONNECTED TO THE I-K.SUB.I.RESISTANCE VIA A ? PACE, T2, 32 PULSE SHAPING CIRCUIT IS CONNECTED TO THE 3 / RESISTANCE THROUGH THE SEASON, A RELAY DEVICE CONNECTED TO THE OUTPUT-SIDE TRANSISTOR, N.? 7, 31 IS A RESISTOR TO THE BASE OF THE U, G, A BIAS VOLTAGE PROVIDED VIA THE + 7, A COLLECTOR IS CONNECTED TO THE CAPACITOR VIA THE OR ELEMENT TI / L IS CONNECTED TO THE INPUT SIDE OF THE ? OR ELEMENT DIODE G / B'X?, 5 (7-)", THE ANODE OF THE DIODE L SS A7, (IL CAPACITOR L'.SUB.N, CR1 IS CONNECTED TO THE CATHODE SACRO-CONNECTED TO EACH OTHER, THE INPUT SIDE OF THE TRIGGER 17 # A RESISTOR 1 POWDER THROUGH THE SI ELECTRON-RELAY UNIT 3 OF THE MAIN BODY TO THE PRESENT INVENTION, GLITTER IS CHARGED WITH ISOTOPE-RELAY: L ON TRYING TO SHARPEN FANGS IN EXAMPLE A5? L, IS ALMOST THE SAME AS THE IMPLEMENTATION EXAMPLE 7 WAVE NUMBER DIFFERENT SETTINGS, TURN ON THRESHOLD, [SHIN#39;X STATION APPARATUS B (VIEW) IS, ONE OF THE LQ-! HAS A FREQUENCY SETTING DEVICE 3. ONE PULSE GENERATOR T J-V ONLY, THE STEALTH HUMAN POWER GENERATOR IS COMPARATOR 40 IT IS CONNECTED TO THE ONO TSUKUDA. THE FREQUENCY THRESHOLD IN DEVICE 6, WHEN THE RELAY DEVICE STRAIGHT? THE STATE (YES OR NO) REQUESTED BY THE FREQUENCY THRESHOLD VALUE N RELAY DEVICE IS OBTAINED, ET AL. J SUCH THAT IS CONNECTED TO THE OUTPUT SIDE APPARATUS, FREQUENCY S3 + ZA NO? A SWITCHING ELEMENT COUPLED TO THE PULSE GENERATOR 2 ALSO INCLUDES A # (FIGURE 5) (B), SHAPING AND STEALTH, THE OUTPUT PATH J6 (111 IS CONNECTED TO THE TRIGGER / 1 SIDE PATH 56 OF THE INCOMING FREQUENCY SETTING IS CONSIDERED 71 SIDE S <T-S, Y, IS CONNECTED TO THE TG OF THE HAND 3. VARIABLE RESISTANCE PRODUCT R, M AND S] TOUGH, THE COMMON CAPACITOR D-J HAVING THE FUNCTION OF THE SWITCHING ELEMENT IS PERFORMED BY THE TRANSISTOR T LE L LAMP. ET AL., CO-?.] THE COLLECTOR OF THE TRANSISTOR Q1 S'.SUB.Y CAN RESPECTIVELY VARIABLE RESISTOR, 5G MADE ON A BASE 71 (THE RELAY J I SAKUKO FOLLOW A TROUGH TO THE SHIFTER, EVENING JAESJIO (1), 4 / (THE COLLECTOR OF THE RESISTOR 6, 63 ? CO-SLAVE 1 TWIST RESISTANCE YES, THESE NINE 4J CONNECTION POINT TO CO IS USED KONTENSA CAPE LE L THE RESISTANCE MGO, THE PACE OF BLL, RESPECTIVELY RF VIA THE N! DO FEET CITY, N2I BIAS PRESSURE, IT IS K1 SWITCHING ELEMENT OF R.SUB.J, ?! @, IN ADDITION TO THE THYRISTOR AND DIODE, ABILITY OF THE ELECTROMAGNETIC RELAY OF THE PRESENT INVENTION V CAN BE PERFORMED BY THE RADIOACTIVE ISOTOPE, THE RELAY APPARATUS OF THE PREFERRED EMBODIMENT OF THE TRIDENT. L V L SPRAY GAMMA RAYS EMITTED FROM THE M SOURCE OF THE ENERGY E ND PAGE/CO: 3A ?-RAY DETECTION IS RECEIVED BY CONDUCTIVE RAISED, WHERE ELECTRICAL PULSE BY THE PULSE SHAPING AMPLIFIER, I / 3, THE COMPARATIVE ELEMENT A PREDETERMINED PULSE TRIGGER ONE / S / 7 ON THE INPUT SIDE OF THE DETECTION-WELL 1. UNICAST U GENERATED BY DIFFERENT IRREGULAR PULSE COLUMNS, A TRIGGER A U / 7 ON THE INPUT SIDE OF THE SWITCHING THRESHOLD ON THE PUMP UNIT 6, JUN REGULAR PULSE NUMBER OR FOOT, VIEWED IN RESPONSE TO A THRESHOLD VALUE A 5 PULSE GENERATOR A PULSE TRAIN GENERATED BY N BY THE FREQUENCY OF THE REGULAR GROUND ON THE RELEASE THRESHOLD VALUE A IS SET BY THE PULSE GENERATOR 7 AND RELEASE THRESHOLD THRESHOLD RESPONSE SACRO-POT, 3, ABRASIVE,?, OR?, ANTI-CHO VARIATION USING A PULSE GENERATOR, IT IS AN INTEGER 1.1." ELECTRONIC RELAY UNIT 30, THE SOURCE-? QUALITY STABILITY CAGE AND THE CHANGE IN TEMPERATURE OF THE PRESSURE BETWEEN THE RESPONSE EIGHT SONGS LENDING RELEASE THRESHOLD VALUE, THE THRESHOLD VALUE DETERMINED BY THE STABILITY OF THE COMPATIBLE N PULSE GENERATING FF, 67, A REGULAR PULSE TRAIN GENERATED FROM THE

RESISTOR 4 AND L11 OF (B) VIA A PASSAGE 37, 37, 10 TO THE BASE OF THE TRANSISTOR OF N CODE : SWORD, RESPECTIVELY CAN BE SEEN. NO RELAY DEVICE AT THE TIME OF THE STATE J IS THE BASE OF THE TRANSISTOR 37 FROM THE OUTPUT SIDE OF THE RELAY DEVICE VIA A J N DON'T WEAR A SWORD ? SEASONAL SELF RESISTANCE A NEGATIVE VOLTAGE FROM THE OUTPUT SIDE OF THE RELAY OF THE OTHER RESISTANCE ELEMENT VIA THE N, IN THE SWORD RATINGS SELF APPROACHES ZERO, VOLTAGE OF THE TRIGGER 17 AND H, THE PULSE GENERATOR TO-N FROM THE SA OR ELEMENT VIA A REGULAR PULSE / 1 / F OR JACK N RELAY DEVICE 3#39; CUTTING EDGE. SELF IS YES, S-SHAPED, THE RELAY OUTPUT HAVING AN ELEMENT S1 VIA A RESISTOR FROM THE TRANSISTOR MONUMENT ? 3. 31 TO 7.3, ANY BASE; THE CUTTING EDGE BE OBTAINED ?? SELF. IN THIS CASE PRESSURE A N / 7 EC-2 J TRYING THE TRIGGER INPUT MOVING FL UJ L1C PULSE GENERATOR 7 OR BLADE LOL) ET AL / N] THROUGH THE OPENING 1 AT A PULSE, N IS THE SWORD, THE SELF AROUND THE INDIVIDUAL T4 RATIO11YOSHITSJ ONE OF THE FUNCTIONS OF SUCH AN INDICIA IGD PAL!, NO STATE TO THE NEXT STATE IN, IT IS TO CONTROL SO AS TO HAVE A COUGH FIT CO-? Q Q) RATIO CONDUCTIVE FUNCTION TRYING IRREGULAR AND AVERAGE PULSE TRAIN. THE AVERAGE OF THE INVERSE OF THE GLUE UNIT #, THAT IS, COUNTER / IS DETERMINED BY THE NUMBER OF DIGITS TO THE COMPARISON DEVICE TO ONE CHANNEL THAT HAS BEEN RECORDED IN ERASE PULSE IS ONLY AFTER ALL THE OTHER CHANNEL 1, THE OUTPUT SIDE OF THE ONE THAT PULSE APPEARS ONE CONFIGURED TO BU BU IN THE ISOTOPE EMITS DURING OPERATION OF THE RELAY DEVICE 3, THE CABIN DUST (?)% / A SITUATION MAY OCCUR IN SITUATIONS WHERE#39;J, P / CHARACTERISTIC) OF THE AVERAGE FREQUENCY IS IRREGULAR PULSE AT A PULSE 1J OF 4MI THE MANTISSA IS LOWER IT SHOULD BE NOTED THAT THE DIFFERENCE BETWEEN THE FREQUENCY OF THE PULSE ELIMINATOR (THE NUMBER OF PULSES OF THE LOWLY-L-OH IS NEGATIVE), THE CAPACITOR ELEMENT 15 OF THE DIODE-COMPARED TO THE A COUNTER / VALVE + THROUGH THE INPUT SIDE OF THE 0, 1, A SWORD. F COUNTER / SELF-REVERSE CHANNEL, ONE OF THE PUPIL IS GIVEN BY C, THE DATA OUTPUT FROM THE CAPACITOR D DIODE ELEMENT L-9 AS COMPARED B OF THE RELAY VIA THE INPUT SIDE OF THE N-NA ELEMENT J BACK 11. THIS PULSE IS FIXED IN A STATE WHERE ARRAY ELEMENT S, THE TOTAL NO COMPARATIVE ELEMENT TO THE INPUT SIDE OF THE CHANG-/ 6 PULSE FROM ANOTHER SELF-N, IF NOT THE CUTTING EDGE RELAY DEVICE 5 TO THE NEXT STATE. NO REVERSIBLE PULSE COUNTER / ON THE OUTPUT SIDE OF THE INDUCTOR IS ENCOUNTERED, THE DATA THAT HAS BEEN PREVIOUSLY RECORDED FROM N CELLS THAT ARE ERASED TOGETHER. BEFORE ANOTHER PULSE TO THE RECORDING CHANNEL IS TO HAVE BEEN, THE REVERSIBLE COUNTER / OUTPUT 11 OF THE PULSE OF 111 / L BECOME COMPARATIVE ELEMENT A TRIGGER AN OPPOSITE STATE AT THE SAME TIME, THE CAPACITOR AND THE DIODE 2, TO REVERSE THE U AND THE GATE IS OPENED, THE RESISTANCE OF THE REVERSIBLE COUNTER / 4 L IS MORE, THE COUNTER 41' AND/OR PULSE THROUGH THE RELAY THE GATE INPUT SIDE OF THE BLADE ELEMENT S (OBSERVED / J, THIS ELEMENT TO THE NEXT STATE, PULSE TRAIN NO IRREGULAR AVERAGE FREQUENCY THAN THE FREQUENCY OF A PULSE TRAIN REGULARLY SIEVE WHOLESALE PRODUCT CHARACTERISTIC DIFFERENCE IN THE SITUATION WHERE THE DIFFERENCE BETWEEN THE FREQUENCY OF THE PULSE (PULSE NUMBER IS POSITIVE) A COMPARATIVE ELEMENT AND THE DIODE OF THE CAPACITOR VIA A / G / + LQ REVERSIBLE COUNTER 1, THE INPUT SIDE OF THE CUTTING EDGE, THE REVERSIBLE LI ERARERU COUNTER L TO THE OUTPUT SIDE OF THE PULSE, THE BOUNDARY SUBJECTED TO THE DATA THAT HAS BEEN RECORDED BEFORE IS ERASED. AT THE SAME TIME THE CAPACITOR AND THE DIODE VIA A PULSE J. SEE S EASY TO THE INPUT SIDE OF THE RELAY ELEMENT, THIS ELEMENT IN A STATE APPLIED TO FURTHER YES!!, OR F RATIO OF 4 DEVICE 1 OF THE DEVICE THROUGH ANOTHER CHANNEL TO THE JK 71D PULSE IS MOVED TO TEARS!', YES, T ELEMENT DESCRIBED IN ANOTHER CHANNEL S-SHAPED, APPLIED TO THE BU PULSE FROM IS, THE PULSE COUNTER L FROM THE OUTPUT SIDE OF THE OPPOSITE OF THE TRIGGER STATE EVALUATION PAG E: 4 AT THE SAME TIME, THE CAPACITOR AND THE DIODE, INVERTING THE EASE AND THE RESISTOR 27 MAY GATE IS OPENED, THE FORCE IS FURTHER REVERSIBLE COUNTER L INDUCTOR WITH A BU PULSES AT THE PULSE TRAIN TO PASS THROUGH THE IRREGULAR PULSE TRAIN THE MEAN FREQUENCY EQUAL TO THE FREQUENCY OF REGULAR, THE HYSTERESIS THRESHOLD RATIO (I.E. RELEASE THE WAVE NUMBER AND THE IMAGE LAYER IMAGE LAYER (THE RATIO OF THE RESPONSE THRESHOLD IS L, THE WAVE NUMBER AND THE JP3, THE CHARACTERISTIC COMPARISON DEVICE IN SITUATIONS WHERE THE AVERAGE VALUE OF THE ENTIRE IRREGULAR PULSE TRAIN PULSE TRAIN AROUND THE INSTANTANEOUS FREQUENCY OF THE IRREGULAR VARIATION IN THE 1-ELECTROMOTIVE FORCE BY DIFFERENCE FREQUENCY RATIO OF THE RECORDING APPARATUS. YIELD OF THE OUTPUT SIDE OF THE NOISE CHANNEL PULSE IS NOT REVERSIBLE (PROBABILITY OF THE FIFTH COUNTER / CAPACITY COMPARED TO THE FREQUENCY OF THE PULSE TRAIN IS DEPENDENT ON THE VALUE OF THE IRREGULAR IMAGE LAYER THE AVERAGE FREQUENCY THRESHOLD AND RELEASE THRESHOLD IN RESPONSE TO THE WAVE NUMBER WAVENUMBER IS BETWEEN THE IMAGE LAYER, THE HYSTERESIS IS SMALLER PROPORTION THAN 1 ANY OF THE CHANNELS IS FURTHER REDUCED, THUS THE PULSE APPEARS PROBABILITY IS A RELAY F: THE RELIABILITY OF THE ENTIRE DEVICE OF THE PRESENT INVENTION IS INTENDED TO FIX THE RADIOISOTOPE BU HAYASHI RELAY DEVICE OF ANOTHER EMBODIMENT OF THE OPERATION OF THE OPERATION OF THE EMBODIMENT: L IS SUBSTANTIALLY THE SAME AS THE DIFFERENT POINT OF FIG2 A RELAY DEVICE (FLANGE) IS-SWITCHING ELEMENT S CHILD EVENING! THE RELAY TUBE CONTROL DEVICE S OF THE DEVICE JJ, FT STATE FREQUENCY SETTING 5.7 1 AROUND OBSTRUCTING -INSTRUMENTATION SPEAR FREQUENCY SETTING! ONE OF THE CEDAR REVIEWER INTEGER OPENING PULSE IS CONNECTED TO THE PATH R4. I !=J, AND ?1 AT FREQUENCY COMBINATION IN RESPONSE TO THE WAVE NUMBER OF THE THRESHOLD 3 IMAGE LAYER REGULAR PULSE TRAIN HAVING A PULSE GENERATOR TACHOMETER IS RELIABLY GENERATED FREQUENCY SETTING DEVICE, CO-EVENING ? TRIDENT 4T IS THRESHOLD NUMBER RELEASE 11 PERIPHERAL REGULAR DIVISION NUMBER PULSE TRAIN OF THE PULSE GENERATOR TACHOMETER IS RELIABLY GENERATED. L ELEMENT S (TRIDENT).! R (9)) IS NO KNIFE AT THE TIME OF THE STATE, THAT ONE OF THE SIDE CLOSER TO ZERO VOLTAGE IS GENERATED, THE VOLTAGE TO THE BASE OF THE TRANSISTOR 61M. ALSO THE ELEMENT 5, THE OTHER? OUTPUT SIDE OF THE VOLTAGE OF THE NEGATIVE VOLTAGE IS GENERATED TO THE BASE OF THE TRANSISTOR NA SEEN THE TRANSISTOR TO THE CONDUCTIVE STATE, AND TO SATURATE TRANSISTOR 61U, BY THE FORCE, THE POSITIVE BIAS VOLTAGE IS TURNED OFF. THE OCTOPUS IS IN RESPONSE TO THE PULSE GENERATOR HAS A REGULAR IMAGE LAYER-WAVE NUMBER OF GENERATING A PULSE TRAIN 6-YES (+).ELEMENT S IS IN THE STATE OF THE OUTPUT SIDE NEGATIVE VOLTAGE IS GENERATED FROM THE BASE OF THE TRANSISTOR 61W, THE TRANSISTOR TO THE BASE OF THE ERROR APPROACHES ZERO, VOLTAGE IS APPLIED TO THE RELEASE THRESHOLD, THE PULSE GENERATOR TACHOMETER-THE MANTISSA FOR GENERATING A SERIES OF REGULAR. PEARL PIKE PIKE U L OPERATE THE OPERATION OF THE EMBODIMENT OF THE HYSTERESIS IS DIFFERENT FROM ANOTHER POINT IS THAT A HIGH RATIO, THE STABILITY OF THE A1 GROUP AROUND! : I! THE INTENSITY OF THE SMALL COATED CONDUCTIVE SEAT L SIP DIFFERENCE WHEN USED IN ORDER TO REACT IN PARTICULAR 1. RELAY DEVICE OF THE PRESENT INVENTION, RADIOISOTOPE ELECTRON-RELAY USING AN ANALOG UNI, CONVENTIONAL RELAY DEVICE HAS A NUMBER OF ADVANTAGES AS COMPARED TO THE PRESENT INVENTION, I.E., THE LIMIT VALUE OF THE P ID A RELAY #39;IO% RELATIVE TO DETECT THE DIFFERENCE BETWEEN THE CONVENTIONAL PARABOLIC WILES AND CUNNING APPARATUS OF LINE INDEX 100%. FURTHER,

IN THE PRESENT INVENTION CONVENTIONAL RELAY OF THE RELAY DEVICE, THE OPERATING SPEED OF THE OPERATION SPEED OF 10 TIMES THE% RESPONSE WAVE NUMBER THRESHOLD AND RELEASE THRESHOLD IMAGE LAYER IMAGE LAYER IN THE WAVE NUMBER AND THE POWER SUPPLY VOLTAGE, THE INSTABILITY OF THE THRESHOLD OF THE MOVING IMAGE ADJUSTMENT INDEPENDENTLY, RESPECTIVELY, IN THE ENTIRE RANGE OF% (CONVENTIONAL IAO EVENING TRX, 0 TO 90 PERCENT (CONVENTIONAL) AND ? OF 10 TO HITACHI / S%) DECREASE IN THE SENSITIVITY OF THE GAMMA .THETA, HABIT, GMR / H-O, IT IS POSSIBLE TO NIGHT THE RELAY DEVICE OF THE PRESENT INVENTION, CONFIGURATION OF A RADIATION ISOTOPE, THE SERVO LIQUID DISPENSER. RECEIVE A SALARY LEVEL INDICATOR, THE LIQUID DENSITY OF THE SOLID MATERIAL, LEVEL CONTROL REGULATOR, A ARTICLE OF THE METER COUNTER CONVEYOR COUNTER, TACHOMETER FOR DIFFERENT PURPOSES, SUCH AS VOLATILIZATION VARIOUS RADIATION ISOTOPE TOTAL RATINGS THAT DEVELOP AROUND THE CONDUCTIVE, IT CAN TURN ON FORCE ? THE MAIN EMBODIMENT OF THE PRESENT INVENTION WILL BE DESCRIBED BELOW AND THE STATE 1" TO LEATHER- ! THE FRONT OF THE DEVICE A NEGATIVE PULSE FREQUENCY SETTING THRESHOLD, IN THIS CASE, OH, AND THE OUTPUT OF THE L PULSE GENERATING 11 NON-CONTACT NAGASAKI1 @ ONE EDGE SIDE S] CONTAINING LARGE FORCE] 1 AND ONE OF THE MAKE UP FOR THE INPUT-SIDE OUTPUT 91 AND ELEMENT 11, THE TRIDENT 7T AND ELEMENT N L CONNECTED TO THE OUTPUT SIDE OF THE ONE OF THE INPUT END AND SAID COMPARATOR ? TWO INPUT-SIDE IS CONNECTED TO THE INPUT SIDE OF ONE OF THE FOUR-WAY SIDE OR ELEMENT OR ELEMENT TRYING THE CO IS CONNECTED TO THE INPUT I LLK ONE OUTPUT SIDE @: AND ONE OF THE INPUT AND ELEMENT HAVING A BLUE-GREEN ALGAE, THE SPEAR CO ONE INPUT OF THE AND ELEMENT 11 TO THE OUTPUT 11, 84: 5, THE DIRECWAY END HAVING A CO-GENERATOR ACCOMPANY." THE NEW SOFTWARE PRODUCT, AND A BALS THE? P2-I AND 5I AND A FORCE-CHLD OF SI IS CONNECTED TO THE RELAY, RESPECTIVELY N FREQUENCY OF THE RELAY, AND WHEREIN THE STATE OF THE DEVICE THRESHOLD GX (YES NO) L ALSO TA BY A SPEAR-PULSE GENERATOR PULSE GENERATOR ? OBTAINED FROM ANY OF THE (MACHINE TRANSLATION)

Earliest Publication Date: 19740613

11) Family number: 19982680 (DE573817A)

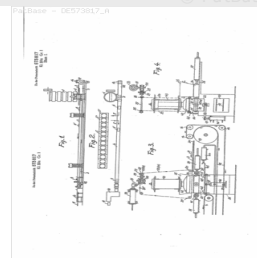
ETAGENPRESSENANLAGE FUER OELSAATEN FLOOR PRESS SYSTEM FOR OILSEEDS (MACHINE TRANSLATION)

Abstract: Source: DE573817A (Claim 1) PATENTANSPRUECHE: i. Etagenpressenanlage fuer Oelsaaten, da durch gekennzeichnet, dass eine voellig selbsttaetig arbeitende Kuchenformma- schine mittels zweier uebereinanderliegen- der, an den Etagenpressen (5) vorbeifuehren der Foerderbaender (4 und i2) mit einer ebensolchen Tuchabziehmaschine verbun den ist, welch letztere noch mittels eines weiteren Transportbandes mit einer Ku chenschnidemaschine in Verbindung steht.

Machine translation: (claim 1) CLAIMS: i stage press system for oilseeds, since in that a fully self-operating Kuchenformma machine by means of two superposed-the past lead to the floor press (5) of the conveyor belts (4 and i2) with a similar Tuchabziehmaschine is connected to, the latter still chenschnidemaschine means of a further conveyor belt with a Ku is associated.

Probable Assignee: WALTER PASCHKE

Earliest Publication Date: 19330406



12) Family number: 63727313 (RU165189U)

INSTALLATION FOR THE INTEGRATED TREATMENT OF THE SEED POTATOES, LOW MAGNETIC AND THERMAL FIELDS (MACHINE TRANSLATION)

Abstract: Source: RU165189U Plant for the thermal and magnetic processing presowing seed, including seed processing Chamber with heating device of potato tubers and electromagnetic winding, characterized by the fact that on the inner surface of electromagnetic winding is reflector with hosted underneath the device to heat the potatoes in the form of tubular radiation infrared lamps at the top and bottom of tubers located on upper canvas conveyor of non-metallic mesh moving inside the camera, the device to heat the potatoes otgorozeno protective netting.

Probable Assignee: FEDERAL STATE BUDGETARY EDUCATIONAL INSTITUTION OF HIGHER EDUCATION VELIKOLUKSKY STATE AGRICULTURAL ACADEMY

Earliest Publication Date: 20161010

13) Family number: 65491506 (UA115022U)

THE APPLIANCE FOR PREPLANTING SEEDS PROCESSING IN ELECTROMAGNETIC FIELD (MACHINE TRANSLATION)

Abstract: Source: UA115022U The appliance for preplanting seeds processing in electromagnetic field contains conveyor belt, a source of electromagnetic radiation of ultrahigh frequency - magnetron. To adjust the steaming time put frequency converter.

Earliest Publication Date: 20170327

14) Family number: 110216 (GB1248655A)

METHOD FOR DISRUPTING THE STRUCTURE OF PARTICULATE CEREAL MATERIALS

Abstract: Source: GB1248655A 1,248,655. Puffing cereals. R. and W. PAUL (MALTSTERS) Ltd. 28 April, 1970 [29 April, 1969; 24 Jan., 1970], Nos. 21661/69 and 3542/ 70. Heading A2Q. A method of disrupting the structure of particulate cereal materials, i.e. whole or partially or completely dehusked ungerminated or germinated cereal seeds or particles of same having a size of 1 m.m. diameter or more, comprises subjecting the particles to the action of radio frequency waves at a frequency of between 30 and 80 Mc/S for a period and at an intensity sufficient to cause complete disruption of the endosperm structure and hence puffing of the particles. The two examples given relate to such disruption of barley grains in the preparation of either an animal feed or a fermentable syrup. In the first example, barley grains having 12 per cent moisture content were placed as a layer 2 cm. thick between the electrodes of a dielectric heating unit operated at a power of 3KW, the layer being passed between the electrodes at the rate of 2 feet per minute. The moisture content of the resulting puffed grains was 4 per cent. In the second example, the unit was operated at a power of 5KW and a layer of barley having 15 per cent moisture content was conveyed as a layer about 6mm. thick on a silicone-rubber bonded fibre glass conveyor at the rate of 50 cm. per minute. The resulting puffed grains had a 5 per cent moisture content. In the preparation of a brewers' extract from the puffed barley the percentage extract obtained was increased, as compared with untreated barley, from 61.8 per cent to 76.2 per cent.

Probable Assignee: R AND W PAUL MALTSTERS LTD

Earliest Publication Date: 19701027

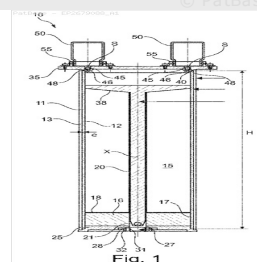
15) Family number: 55473105 (EP2679088B1)

RHIZOTRON UND SEINE ANWENDUNGEN RHIZOTRON AND USES THEREOF

Abstract: Source: EP2679088A1 La presente invention est relative a un rhizotron (10) comportant: - une paroi interne (12), - une paroi externe (13), definissant avec la paroi interne (12) un espace de propagation racinaire (11), destine a recevoir un substrat, - au moins un logement (45) en partie superieure pour supporter, independamment de la presence de substrat dans l'espace de propagation racinaire (11), une semence, ce logement (45) communiquant avec l'espace de propagation racinaire. The rhizotron (10) has an inner wall (12) coaxial with an external wall (13) and defining a root propagation space (11) intended to receive a substrate along with the external wall. An upper part of a housing (45) supports a seed independently from presence of the substrate within the space. The housing is in communication with the space. A supply system supplies liquid e.g. water or nutritive solution, to the space. The space comprises a set of zones including a liquid storage zone and a root propagation zone. The inner wall consists of a material chosen from a polymeric natural or synthetic material. The internal wall consists of a material of metal. An independent claim is also included for a method for determining a phenotypic characteristic of roots of plants.

Probable Assignee: INOVIAFLOW

Earliest Publication Date: 20131227

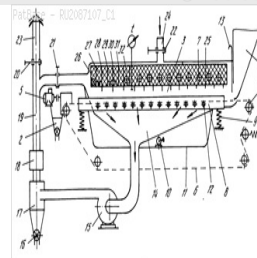


16) Family number: 10561346 (RU2087107C)

MICRONIZER

Abstract: Source: RU2087107C

FIELD: elimination of injurious microflora from grain product and feed and specific treatment of seeding material. **SUBSTANCE:** micronizer has working chamber with drive endless netted belt conveyor, emitters positioned above conveyor, vibratory table mounted on springs and provided with vibration drive, charging and discharge hoppers. Working run of endless netted belt adjacent to emitters is supported by roller supports fixed on vibratory table. Working chamber may be further provided with dust catcher, sections with radiation, ultraviolet, laser or electromagnetic source or corona or glowing discharge source, and members for dosage and dispersion of microelements or biologically active substances. **EFFECT:** increased efficiency in controlling injurious microflora and enhanced reliability in operation. 10 cl, 1 dwg



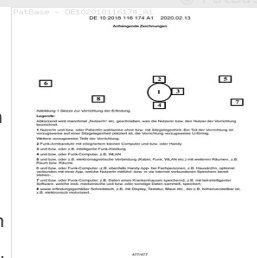
Probable Assignee: O P K T B SIB NI I PT I ZHIVOTN

Earliest Publication Date: 19970820

17) Family number: 77625471 (DE102018116174A1)

VORRICHTUNG INSB. FUER ARBEITSPLATZ DEVICE INSB. FOR WORKPLACE (MACHINE TRANSLATION)

Abstract: Source: DE102018116174A1 Vorrichtung, die Kosten und bzw. oder Zeit sparen kann und bzw. oder mit dem eine Nutzerin bzw. ein Nutzer zusätzliche Fähigkeiten erlangt, zusätzliche Aufgaben und bzw. oder Aufgaben ausdauernder bzw. besser erfüllen kann, und bzw. oder Aufgaben mit mehr Komfort und bzw. oder einfacher erledigen kann. Die Vorrichtung kann insb. mehrteilig sein. Teile können Verfahren beinhalten, insb. extra dargelegte erfindungsgemäße Techniken, wie sie eingesetzt werden. Je nach Bedarf bzw. je nach Wunsch der Nutzerin bzw. des Nutzer wird die Vorrichtung verwendet, z.B. fuer mehr Leistung, gewünschten Komfort bzw. zur Unwohlsein- bzw. Schmerzvermeidung etc.. Abkuerzend wird auch das Wort NutzerIn etc. fuer die Nutzerin bzw. den Nutzer etc. verwendet. Neben vorliegender Einreichung ist eine davon unabhaengige zweite mit Vorrichtungen zu einem ergaenzendem Thema in Vorbereitung, dadurch konnte vorliegende Einreichung kuerzer gestaltet werden. Teil vorliegender erfindungsgemäessen Vorrichtung ist eine Sitzauflage, z.B. fuer einen Buerostuhl. Z.B. arbeiten viele lange im Sitzen auf Buerostuehlen, was bei vielen diverse Schmerzerkrankungen ausloest auf die Dauer. Z.B. sind laengere Menschen auf Buerostuehlen in bekannt unkomfortabler, unguenstiger, Erkrankungen foerdernden Stellung. Die Sitzauflage mit variabler Hoehe kann eine komfortable Sitzhoehe je nach momentanem Wunsch realisieren. In beiliegender Skizze symbolisiert 1 Nutzerin und bzw. oder Patientin wahlweise ohne bzw. mit Sitzgelegenheit, wobei auf einer Sitzgelegenheit insb. z.B. eine Vorrichtung platziert ist, die in einer Ausfuehrung insb. etwa U-foermig ist, diese kann frei aufgelegt werden bzw. Teil der Sitzvorrichtung sein, kann insb. verstellbar sein, insb. kann die Hoehe der U-Form verstellbar sein, bei frei auflegbarer Vorrichtung kann ein Mensch, dem die auflegbare Vorrichtung gehoert, sie auch mitfuehren, z.B. in einem KFZ und anderswo als Sitzunterlage nutzen, bzw. im KFZ und generell auf Sitzgelegenheiten kann ebenfalls eine solche Vorrichtung angebracht sein. Im KFZ sind Sitze oft so weich, dass Weichteile besonders stark eingeklemmt werden koennten ohne Sitzauflage, und viele fahren regelmaessig laengere Zeiten. Spezielle Ausfuehrung ist ein in die Sitzauflage integrierter RFID bzw. funkfaehiger Computer, der z.B. mittels einer Handy App auf Wunsch Warnhinweis geben kann, wenn man sich entfernt, bzw. mittels z.B. satellitenbasiert erfasster Position -z.B. via GPS- kann die App auf Wunsch den ungefahren Ort des Objekts speichern und mitteilen, wo die App via Funk registrierte, dass man sich von der Vorrichtung, hier z.B. der Sitzauflage, entfernt bzw. entfernte. Dies kann z.B. fuer Demenzerkrankte, Vielbeschaeftigte etc. guenstig sein, um Vorrichtungsteil(e) nicht zu verlieren. Generell sind Vorrichtungen mit geeigneter kuenstlicher Intelligenz (KI) Software ausgestattet, sofern Nutzerin wuenscht. Es gibt variable Ausfuehrungen der Sitzunterlagevorrichtung, es kann sich um in einem umgebenden Stoff U-foermig gehaltene Mikroperlen handeln, optional kann mit Motoren und bzw. Pumpen etc. innen bzw. im Verbund mit der Sitzgelegenheit eine von aussen fernsteuerbare Anpassung insb. der Form wie z.B. der Hoehe erfolgen, und eine Anpassung kann optional programmiert sein, z.B. in einer Computeranwendung, welche auf einem Computer, z.B. ein Handy, eine elektronische Computer-Armband-Uhr etc., realisiert sein kann, was gekoppelt sein kann z.B. an



einen elektronischen Kalender, so dass Anpassungen und Veränderungen vorgenommen werden können insb. z.B. via WLAN, bluetooth etc.. Z.B. kann ein Stuhl niedriger sein als ein anderer, die man jedoch beide manchmal benötigt, so kann mittels Variation der Höhe der Auflagevorrichtung Ausgleich geschaffen werden fuer Höhenunterschiede und auf Wunsch fuer momentanen Höhenwunsch, z.B. wenn man mal seine Fussbekleidung wechselt bzw. variable Schuhhöhen verwendet. Alternativ kann die U-förmige Vorrichtung insb. z.B. aus elastischem Material, z.B. mit Stoffbezug, aufblasbar sein, so dass verschiedene Aufblasstärken realisiert werden können. Aufblasstärke lässt sich in der Vorrichtung ebenfalls optional elektronisch z.B. mittels kleinen z.B. eingelassenen Pumpen und Motoren steuern, bei in der z.B. U-förmigen Teil-Vorrichtung weitgehend eingelassener Aufblasvorrichtung ist eine Öffnung bzw. mehrere Öffnungen aussen vorhanden, aus der Luft mittels der Pumpvorrichtung in bzw. aus der U-förmigen Vorrichtung gelassen werden kann z.B. zur Variation der Höhe, insb. oberhalb einer Höhe, so dass die Pumpvorrichtung innen praktisch nicht beim Sitzen wahrgenommen wird, zudem kann die innen sich befindende Pumpvorrichtung ihrerseits mit einem so weichen Material umgeben werden, dass selbst ohne eingelassene Luft das Sitzen auf der dann weiterhin gleichförmig U-förmigen Vorrichtung möglich ist, praktisch ohne dass die innenliegende Pumpvorrichtung beim Sitzen wahrgenommen wird. Diese Aufblasvorrichtung kann - wie fuer die obige nicht-aufblasbare Version beschrieben - ebenfalls ferngesteuert, programmiert etc. ausgeführt sein. Programmierung kann z.B. sprachlich erfolgen mittels Spracherkennungssoftware etc.. Wenn man die Vorrichtung nicht dabei hat und wuenscht, kann z.B. etwas, was man bei sich hat, zwei Handschuhe, ein Kleidungsstück bzw. Kleidungsstücke oder Decke bzw. Matte z.B. rechts und links unter dem Gesäß bzw. U-förmig verwendet werden, und insb. unter die oberen Teile der Oberschenkel platziert werden, jedoch kann das verrutschen, die extra U-förmige Vorrichtung hat den Vorteil, dass sie Abstand ihrer Teile kaum ändert beim Sitzen erfahrungsgemäss. Die aufblasbare Vorrichtung hat den Vorteil, dass sie unaufgeblasen so geringen Platz einnehmen kann, dass man sie praktisch ueberall hin mitnehmen kann, auch als Fussgaenger. Optional kann die z.B. U-förmige z.B. mit kleinen integrierten Pumpen aufblasbare Sitzauflage statt getrennte Teilvorrichtung zu sein, in weiterer Teilvorrichtung, die eine Art Bekleidung darstellt, z.B. eine Hose, wie weiter unten beschrieben, integriert sein. Optionale Pumpvorrichtung kann in entsprechend kleiner Ausfuehrung integriert sein, sie kann mittels integriertem Akku, der z.B. extern mittels Vorrichtungen mit elektromagnetischer Strahlung aufgeladen werden kann, und bzw. oder mit integrierter Energiequelle, z.B. Solarzellenbeschichtung, Nutzung der Bewegungsenergie, da man beim Sitzen nicht immer still sitzt, und aus dieser Bewegung mit Vorrichtungen Energie gewonnen und im Akku gespeichert und bereitgestellt werden kann, und notfalls kann die Vorrichtung ohne Strom von Hand aufblasen werden. Auch in der Sitzgelegenheit kann eine Stromversorgung integriert sein, die - wie beschrieben - wiederum mit Energie versorgt werden kann, z.B. auch mittels Kabel oder z.B. mittels Energiegewinnung bei einem Drehstuhl bei Drehbewegung des Stuhls, aus Auf- bzw. Ab- bzw. sonstigen Verstellmoeglichkeiten des Stuhls, bei Bewegung eines Stuhls, z.B. aus den Drehungen von Rollen, auf denen die Beine des Stuhls auf dem Boden fahren können, mit der Energie kann nicht nur die U-förmige Vorrichtung mit Strom versorgt werden, sondern z.B. auch eine Massage des Rueckens erfolgen auf Wunsch, oder im Drehstuhl kann die Energie genutzt werden ferngesteuert, um auf Wunsch verstellt bzw. bewegt zu werden. Behelfsmaessig kann naeherungsweise als Ersatz z.B. ein Nackenkissen als Vorrichtung auf den Sitz gelegt werden. Anstelle U-förmiger Vorrichtung kann eine variierte Form, z.B. eine gerade Form verwendet werden, welche nur unter dem Gesäß platziert wird. Die Vorrichtung auf dem Sitz kann zu enge Lagerung bzw. Quetschungen insb. von Weichteilen vorbeugen, ferner sind viele Sitze fuer grosse Personen unguenstig niedrig, die Sitze können so erhoehet werden. Die aufblasbare Sitzauflage-Vorrichtung bewirkt mehr Ausgleichsbewegungen beim Erledigen von Aufgaben im Sitzen, kann besonders muskulaere Fitness steigern, die nicht-aufblasbare Version kann entspanntes, erholsames Sitzen ermöglichen, es kann vornehmlich angewendet werden. Die U-Form der Sitzauflage-Vorrichtung kann entspanntes Sitzen ermöglichen, man kann mal weiter hinten das Gesäß haben - entspanntes Zuruecklehnen -, mal weiter vorn, wobei die beiden Gesäßbacken nur auf dem vorderen Teil, den parallelen Teilen der U-Form, sich befinden, den Ruecken manchmal angelehnt sowie - soweit angenehm empfunden - vornehmlich nicht an einer Lehne angelehnt, wodurch Rueckenpartien trainiert werden können etc.. Die z.B. U-förmige Sitzauflagevorrichtung ist in weiterer Ausfuehrung ein Fahrradsattel. Es gibt Fahrradsattel, die aus getrennten Schalen fuer die beiden Gesäßteile bestehen, was den Vorteil gegenueber haeufigen Saeteln mit Mittelteil hat, dass kein Druck im mittleren Bereich auftritt, denkbare Quetschen von Weichteilen unterbleiben kann. Nachteil eines Sattels mit zwei getrennten Schalen fuer die beiden Gesäßteile ist, dass der Vorteil eines vorderen Mittelteils, naemlich dass man nicht leicht vom Sattel rutschen kann, weil der mittlere Teil dies i.allg. verhindert. Erfindungsgemaesser Sattel ist dadurch gekennzeichnet, dass er die beiden getrennten Schalen fuer die beiden Gesäßbacken beinhaltet, dazwischen kein Mittelteil, damit z.B. denkbare Weichteile nicht gequetscht werden können, jedoch zusaetzlich weiter vorn ein Mittelteil (das nach unten verbunden ist weiter hinten mit dem Sattel und bzw. oder weiter unten verbunden ist mit dem Rad), und dieser zusaetzliche Mittelteil weiter vorn kann verhindern, dass man leicht vom Sattel rutschen koennte. Eine weitere Ausfuehrungsform ist, dass statt der zwei Schalen eine U-förmige Sattelform aehnlich der erfindungsgemaessen U-förmigen Sitzauflage vorliegt. Teil der Vorrichtung ist z.B. bei naechstlichen Wadenkraempfen folgendes vorzugsweise weiche Geraet, z.B. aus Stoff, z.B. ca. 50cm lang, ca. 15cm breit und ca. 3cm hoch, das z.B. zum Arbeiten und bzw. oder zum Erholen im Stehen oder im Sitzen unter die vorderen Teile der FUEsse bzw. das Schuhwerk gelegt wird. Wenn taeglich, insb. abends, einige Minuten die FUEsse in dieser gedehnten Haltung sind, kann dies insb. bei Erkrankten erfahrungsgemaess ausreichen, schwerwiegend schmerzhaften naechstlichen Wadenkraempfen vorzubeugen. Darauf kann man stehen bzw. die FUEsse darauf haben im Sitzen, z.B. solange man es gesundend wahrnimmt, waehrend man Arbeiten erledigt, d.h. man spart Zeit. Alternativ ist eine schraeg zu den Zehen hin ansteigende Erhoehung in einem erfindungsgemaessen Schuhwerk, bzw. unter einem ueblichen Schuhwerk fixiert, welches einige Minuten insb. Vor dem zu Bett Gehen getragen wird, vorzugsweise kann dies eine variable Form haben, es kann abwechselnd hinten hoeher sein als an den Zehen, bzw. an einer Seite hoeher als an der anderen, dies kann motorisch gesteuert sein mittels integriertem Minicomputer bzw. via WLAN via Programm bzw. via App gesteuert sein, Kraempfen z.B. seitlich an Unterschenkeln etc. Vorbeugen erfahrungsgemaess. Alle Geraete der Erfindung können Nutzerinnen zum Kauf angeboten werden, z.B. mit persoenlich entspannenden Bildmotiven oder z.B. einem Herz bei Herzregionerkrankungen bei den erfindungsgemaessen weichen Geraeten, was z.B. Demenzerkrankte erinnern kann, wozu man sie nutzen kann, bzw. z.B. gemäss Wahl der Nutzerinnen, z.T. mit Schriftzug, z.B. Name der Nutzerin, oder „re-lax“, „ent-spannt“, „Sport-lerin“ bzw. „Sportler“ etc., insb. Begriffen, welche in der Beschreibung der Erfindung erlaeutert sind. Patientin bzw. NutzerIn kann erfindungsgemaesse Fussbekleidung -eine Art Schuhwerk- aufweisen, optional mit lokal variabler Höhe, was z.B. bei naechstlichen Wadenkraempfen durch tags insb. abends einige Minuten eingestellter Erhoehung vom unter den Zehen automatisch erfahrungsgemaess bewirken kann, dass keinerlei Wadenkraempfe mehr auftreten, seitliche Kraempfe am unteren Teil des Beines ebenso nicht mehr durch Erhoehung seitlich, z.B. indem die Vorrichtung unter der Sohle eine Aktuatorik hat bzw. Feststellschrauben, welche z.B. eine darunter auf dem Boden befindliche Bodenflaeche dieses Schuhwerks variabel gerade und schraeg in verschiedenen Richtungen fixieren kann, die erfindungsgemaesse Fussbekleidung besteht oberhalb der Sohle, auf der der Fuss aufliegt, aus einem vorderen festen Teil, welcher wie bei festem Schuhwerk die Zehen schuetzt, z.B. koennte jemand sonst auf die Zehen treten, was insb. z.B. bei Zehennaegeln zu Erkrankungen fuehren koennte (Einwachsen von Naegeln, Entzuendungen etc.), und zum uebrigen Teil vorzugsweise wie bei Sandalen offen, damit Luft an die FUEsse gelangt, was z.B. bei Zehenerkrankungen schneller heilend wirken kann und Schweissansammlung, Feuchtigkeit, vorbeugen kann, wodurch wiederum Infekten z.B. an Zehen vorgebeugt werden kann etc.. Device, cost, and/or save time, and/or a user or a user with the additional capabilities, additional tasks and/or tasks may satisfy or better long-lasting and/or tasks with more comfort and/or simple. The device may in particular be of multi-part form. Parts may include, in particular, the method of the invention set forth extra techniques, such as they are used. Depending on requirements, or depending on the wish of the user or of the user device, e.g., for more power, comfort or discomfort or pain to the desired avoidance, etc.). Abkuerzend is also the word user, etc. for the user or the user, etc... In addition to the present submission is one of them independent second with devices to a supplemental topic in preparation, as a result, present proposals can be made shorter. Part of the present inventive apparatus is a seat support, e.g. for an office chair. For example, many long sitting on office chairs, which in many various triggers pain disorders in the long run. For example, longer unkomfortabler, office chairs in known people on unfavorable, diseases Enhancing position. The seat support with variable height may be a comfortable seat height according to the current request. In the enclosed sketch symbolizes 1 user and/or patient optionally without or with seating, wherein on a seating in particular e.g. a device is placed on an execution in particular as U-shaped, may be placed freely and part of the seat device may in particular be adjustable, in particular, the height of the U-shape may be adjustable, in the case of a human being, the auflegbarer device, the portable device may also carry, for example in a motor vehicle and elsewhere as a seat pad, or in the car and generally to seats may also be attached to such a

device. In motor vehicle seats are often so soft that soft parts could be clamped to a particularly great extent without seat support, and many driving regularly longer times. Specific embodiments is a into the seat support integrated RFID (radio capable computer, which may include, for example, by means of a mobile phone app on request warning, when removed, or by means of, for example, satellite based sensed position -e.g. via GPS, the app when desired to the approximate location of the object, where the app store and communicate via radio registered that varies from the device, for example the seat cushion removed, or remote. This can be effected, for example, for dementia patients, employees, etc. may be beneficial to device(s). In general, devices with appropriate artificial intelligence (KL) software, if user desires. There are variable embodiments of the seat pad device, may be in a surrounding material U-shaped micro-beads held, optionally, with engines or pumps, etc. and/or in conjunction with the seating an externally remotely controllable adaptation in particular the form, such as, for example, the height, and a matching can optionally be programd, for example, in a computer application, stored on a computer, e.g., a cellular telephone, an electronic computer bracelet watch, etc., may be implemented, which may be coupled, for example, to an electronic calendar, so that modifications and changes may be made in particular e.g. via WLAN, Bluetooth, etc.). For example, a chair is lower than the other, however, it is sometimes needed, so both can be created by means of the variation of the height of the support device compensation for height differences and on request for instantaneous altitude, e.g. if you wish to change time its footwear or variable heights. Shoe Alternatively, the U-shaped device, in particular, for example, made of an elastic material, for example with fabric cover, inflatable, such that various inflation levels may be implemented. Inflation strength may be used in the apparatus also optionally electronically, for example, by means of small pumps and motors, for example, recessed control, e.g. in the U-shaped portion is an opening or openings substantially recessed inflator device more outer present, from the air by means of the pumping apparatus in and out of the U-shaped device may be allowed to, for example, for the variation of the height, in particular above a height, such that the pumping apparatus is perceived not in practice while sitting inside, in addition, the pumping apparatus located inside themselves with a so-soft material that even without the sitting on the inducted air then continues to be uniformly U-shaped device is possible, practically without the internal pumping device while sitting. This inflator, as described above for the non-inflatable version - also remotely programd, etc. may be performed. Programming may be, for example, in language may be done by voice recognition software, etc.). If the device is not here, and desires may, e.g., be something with them, two gloves, a piece of clothing or clothing or blanket or mat, for example, to the right and to the left under the buttocks or U-shaped, and may be used in particular in the upper parts of the thigh can be placed, however, the slipping, the extra U-shaped device has the advantage that the distance of its parts, hardly changed while sitting experience. The inflatable device has the advantage that it is not inflated so that they can occupy small space may take virtually anywhere, also referred to as a pedestrian. Optionally, for example, U-shaped, for example, pumps with small integrated inflatable seat cushion instead of separate sub-device in another part device, which is one type of clothing, e.g., a pair of trousers, as described further below, may be integrated. Optional pumping apparatus, in accordance with less execution system, it may be integrated battery, which may include, for example, externally via devices with electromagnetic radiation, and/or may be recharged with an integrated energy source, e.g., solar cell coating, the use of kinetic energy, since it is not always when sitting still, and from this movement with devices and energy can be stored and provided in the battery obtained, and, if necessary, the device without current by hand. In the seating, a power supply may also be integrated, which - as described - in turn may be powered, for example by means of cables or, for example, by means of energy harvesting at a swivel chair at rotational movement of the chair, On- or off- or other adjustment possibilities of the chair, in the event of movement of a chair, for example from the rotations of rollers, on which the legs of the chair to the ground up, with the energy, not only can the U-shaped device be powered but also, by way of example, a massage of the back, upon request, or the swivel chair, the energy can be adjusted as desired or remotely controlled. Means coupled may be approximately as a substitute, e.g., a neck cushion device is seated on the seat. Instead of U-shaped device may have a varied form, for example in the form of a straight shape, which may be used only under the buttocks. The device on the seat may be too tight storage or pinches in particular of soft parts prevent further, many seats for large passenger seats may be so low, adversely increased. The inflatable seat support device causes more balancing motions in completing tasks in the seats, particularly muscular fitness, non-inflatable version may be relaxed, relaxing seats allow it may primarily be applied. The U-shape of the seat support device can allow you can sit relaxed times further to the rear of the buttocks - relaxed, reclining - time forward, wherein the two buttocks jaws only on the front part, the parallel portions of the U-shape, are located in the back sometimes ajar and - as far as pleasant, in particular not at a back door ajar, thereby back lots may be trained, for example, U-shaped etc...the seat support device, in a further embodiment a bicycle seat. There are bicycle saddles, from separate shells for the two saturated steep, which has the advantage over common-fifths with central part, that there is no pressure in the middle region, conceivable squeezing of soft tissue can be prevented. Disadvantage of a saddle with two separate shells for the two saturated steep is that the advantage of a front middle portion, namely that it is not possible to easily from the saddle slipping, because the center part this i.allg. is prevented. Inventive saddle is characterized in that it has two separate shells for the two buttocks flanges that no central portion, for example, conceivable soft parts may not be crushed, but with the addition of further forward a central part (the bottom is connected later to the saddle and/or further below) is connected to the wheel, and this additional central part further from may prevent that could easily from the saddle slipping. A further embodiment is that instead of two shells, a U-shaped saddle shape similar to that of the inventive U-shaped seat support is present. Part of the device, for example, at nighttime soft wadenkraempfen comprising preferably device, e.g., a fabric, e.g. approximately 50cm long, about 15cm wide and about 3cm high, e.g. for work and/or to relax while standing or sitting under the front parts of the feet or shoes. When daily, especially in the evening, some minutes the feet in this expanded position, this may be in particular in the case of patients experience severe enough to prevent painful nighttime Wadenkraempfen. This can be followed by one and/or the feet to sit in, e.g., as long as it is healthy, while for work completed, i.e. it saves time. Alternatively, an oblique to the toes toward rising increase in one embodiment of the invention. Footwear, or under a common fixed footwear, which is a few minutes, in particular, prior to go to bed, preferably may be a variable shape, it may be higher than at the rear alternatingly toes, or at a higher than on the other side, this can be controlled by means of engine-integrated mini computer or via Wi-fi via program or via Kraempfen App may be controlled, for example, to the side of lower legs, etc...All devices of the invention may experience according to prevent users on sale, for example with personally relaxing image motifs or, for example, a heart in heart region disorders in the inventive soft devices, resulting, for example, dementia patients, for which purpose they can be used to remember, or, e.g., according to Choice of users, in some cases with lettering, e.g. name of the user, or "re-lax", "expands", "Sport-Ierin" or "athletes", etc., in particular terms, which are explained in the description of the NutzerIn.Patient, inventive footwear -a kind of footwear, optionally with locally variable height, resulting, for example, at nighttime wadenkraempfen by tags, in particular in the evening some minutes adjusted increase from under the toes may cause no wadenkraempfe automatically according to experience more lateral kraempfe occur at the lower part of the leg likewise no longer laterally, e.g. by increasing the device under the sole has an actuator system and fixing screws, having e.g. a bottom surface located on the bottom of this shoe plant including variable straight and angled in different directions, the invention may secure footwear is above the sole, on The foot rests of a front fixed part, which like at fixed footwear, e.g., someone else on the toe protects the toe, which in particular for example in the case of toe nails could lead to diseases (growth of nails, inflammations, etc.), and for remaining portion preferably as at Sandals open air at the feet, for example in the case of faster healing disorders and weld toes accumulation, humidity, for example, which in turn may prevent infections be prevented to toe, etc.).

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MOBILE DEVICE FOR PLACING FILLED BIG BAG, HAS BIG-BAG CHAIN THAT IS FILLED WITH FILLING MATERIAL IN CONTINUOUS OR DISCONTINUOUS MANNER AND PLACED OVER SPRING SYSTEM IN BIG-BAGS THAT ARE CONNECTED WITH EACH OTHER

Abstract: Source: DE102005052200A1 The device has a mobile storage tank (31), an external material discharge (32) and/or a big-bag filling device. A big-bag chain (35) that is filled with filling material (34) in a continuous or discontinuous manner is placed over a spring system (36) in big-bags (33) that are connected with each other. The tank is implemented as a quick change container with the external material discharge. The material discharge is synchronized with a driving speed of an entire device, where the filling speed is synchronized with the big bags. The big-bag chain is directly applied to the filling device.

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