PATENTS

Method of Producing Locally Occurring Infrasound

Patent Number: 3612211 Issue Date: October 12, 1971

Patent holder: Clark, III; William T. (New Orleans, LA)

http://tinyurl.com/q6kcs

The object of this invention is to provide a method and apparatus for producing infrasound utilizing two highly directional acoustical wave sources propagating intersecting beams of sound waves at a frequency which may be in the audible range or above, and which waves in and of themselves, because of their frequencies which are higher than infrasound, do not have the same physiological or neurophysiological effects on a subject in their individual paths but which, in their areas of intersection, combine or beat against one another to produce resultant waves in the infrasonic range. A further object is to provide a system for producing infrasound, but utilizing extremely small sources for the infrasound energy, as compared with previously available sources.

Processes and Apparatus for the Investigation of Internal Physiological Phenomena Based on Measurements of the Impedance Variation of the Surface of the Body

Patent Number: 3789834 Issue Date: Feb. 5, 1974

A method of investigating physiological phenomena of a portion of a body based upon the variation of the impedance or resistivity of the body. An electromagnetic field is applied to a portion of the body and the field at the surface of the body is then measured. The components of the measured field are used to determine the impedance or resistivity of the the body.

Apparatus and Method for Remotely Monitoring and Altering Brain Waves

Patent Number: 3951134 Filing date: Aug 5, 1974 Issue date: Apr 20, 1976

Inventors: Malech; Robert G. (Plainview, NY)
Assignee: Dorne & Margolin Inc. (Bohemia, NY)

ABSTRACT: Apparatus for and method of sensing brain waves at a position remote from a subject whereby electromagnetic signals of different frequencies are simultaneously transmitted to the brain of the subject in which the signals interfere with one another to yield a waveform which is modulated by the subject's brain waves. The interference waveform which is representative of the brain wave activity is re-transmitted by the brain to a receiver where it is demodulated and amplified. The demodulated waveform is then displayed for visual viewing and routed to a computer for further processing and analysis. The demodulated waveform also can be used to produce a compensating signal which is transmitted back to the brain to effect a desired change in electrical activity therein.

Method and Apparatus for Brain Waveform Examination

Patent Number: 3893450 Filing date: Oct 9, 1973 Issue date: Jul 1975

Inventor: John P. Ertl, 15 Linden Ter, Ottawa, Canada

A method and apparatus for examining the brain waveform of a subject, for example in a type of electro-encephalography (EEG), by providing a stimuli, such as a light, and determining a characteristic of a mathematically determinable point in the brain waveforms of the subject. A number of brain waveforms are obtained after successive stimuli and where the mathematically determinable point is the zero crossing point, the time intervals to the second and third falling zero crossings in the brain waveform are considered to provide average values which are identified as the "A, score" and the "B score" respectively and are utilized to indicate the condition of the subject. A closed loop feedback path may be used for stimulation of the subject.

Method for Obtaining Neurophysiological Effects

Patent number: 3835833 Filing date: Sep 21, 1972 Issue date: Sep 1974

A method and apparatus for obtaining neurophysiological effects on the central and/or peripheral systems of a patient. Electrodes are suitably positioned on the body of the patient and a composite electric signal is applied at the electrodes. The composite signal is formed by the superpositioning of two signals: a first signal which is a rectified high-frequency carrier modulated in amplitude to about 100 percent by substantially square-shaped pulses whose duration, amplitude and frequency are chosen according to the neurophysiological effects desidered, and a second signal which has a relatively white noise spectrum. The mean value of the first electric signal has a predetermined sign which is opposite the sign of the mean value of the second electric signal.

Sonic Weapon System

Patent Number: 4349898

Issue Date: September 14, 1982

Patent holder: Drewes; William (Bronxville, NY)

http://tinyurl.com/za3hm

This invention pertains to sonic transmission systems and more particularly to systems for transmitting low frequency sonic signals with long range characteristics. Most particularly, this invention pertains to a parametrically pumped sonicweapon system.

Hearing System

Patent Number: 4877027 Filed: June 6, 1988

Date Issued: October 31, 1989

Application: 07/202,679

Inventors: Brunkan; Wayne B. (Goleta, CA)

Sound is induced in the head of a person by radiating the head with microwaves in the range of 100 megahertz to 10,000 megahertz that are modulated with a particular waveform. The waveform consists of frequency modulated bursts. Each burst is made up of ten to twenty uniformly spaced pulses grouped tightly together. The burst width is between 500 nanoseconds and 100 microseconds. The pulse width is in the range of 10 nanoseconds to 1 microsecond. The bursts are frequency modulated by the audio input to create the sensation of hearing in the person whose head is irradiated.

(RF) Hearing Device

Patent Number: 4858612 Filed: December 19, 1983 Issue Date: August 22, 1989

Inventors: Stocklin; Philip L. (Satellite Beach, FL)

Appl. No.: 06/562,742

ABSTRACT: A method and apparatus for simulation of hearing in mammals by introduction of a plurality of microwaves into the region of the auditory cortex is shown and described. A microphone is used to transform sound signals into electrical signals which are in turn analyzed and processed to provide controls for generating a plurality of microwave signals at different frequencies. The multifrequency microwaves are then applied to the brain in the region of the auditory cortex. By this method sounds are perceived by the mammal which are representative of the original sound received by the microphone.

Electromagnetic or Other Directed Energy Pulse Launcher

Patent Number: 4959559

Issue Date: September 25, 1990

Patent holder: The United States of America

http://tinyurl.com/jlfhk

The physical realization of new solutions of wave propagation equations, such as Maxwell's equations and the scaler wave equation, produces localized pulses of wave energy such as electromagnetic or acoustic energy which propagate over long distances without divergence. The pulses are produced by driving each element of an array of radiating sources with a particular drive function so that the resultant localized packet of energy closely approximates the exact solutions and behaves the same.

Silent Subliminal Presentation System Lowery

Patent Number: 5159703 Filing date: Dec 28, 1989 Issue date: Oct 27, 1992

Inventors: Lowery; Oliver M. (Norcross, GA)

ABSTRACT

A silent communications system in which nonaural carriers, in the very low or very high audio frequency range or in the adjacent ultrasonic frequency spectrum, are amplitude or frequency modulated with the desired intelligence and propagated acoustically or vibrationally, for

inducement into the brain, typically through the use of loudspeakers, earphones or piezoelectric transducers. The modulated carriers may be transmitted directly in real time or may be conveniently recorded and stored on mechanical, magnetic or optical media for delayed or repeated transmission to the listener.

Method and System for Altering Consciousness

Patent Number: 5123899 Filed: January 17, 1991 Date Issued: June 23, 1992 Application: 07/642,439

Inventors: Gall; James (Fountain Hills, AZ)

A system for altering the states of human consciousness involves the simultaneous application of multiple stimuli, preferable sounds, having differing frequencies and wave forms. The relationship between the frequencies of the several stimuli is exhibited by the equation g=s.sup.n/4 .multidot.f where: f=frequency of one stimulus; g=frequency of the other stimuli of stimulus; and n=a positive or negative integer which is different for each other stimulus. ALSO SEE: US PATENT --5,289,438 --METHOD AND SYSTEM FOR ALTERING CONSCIOUSNESS SOURCE: Judy Wall, Mike Coyle and Jan Wiesemann. Paranoia Magazine Issue 24 Fall 2000 -Article -'Technology to Your Mind' - By Judy Wall

Subliminal Message Generator

Patent Number: 5270800 Filed: August 28, 1990

Date Issued: December 14, 1993

Application: 07/574,432

Inventors: Sweet; Robert L. (Troy, MI)

A combined subliminal and supraliminal message generator for use with a television receiver permits complete control of subliminal messages and their manner of presentation. A video synchronization detector enables a video display generator to generate a video message signal corresponding to a received alphanumeric text message in synchronism with a received television signal. A video mixer selects either the received video signal or the video message signal for output. The messages produced by the video message generator are user selectable via a keyboard input. A message memory stores a plurality of alphanumeric text messages specified by user commands for use as subliminal messages. This message memory preferably includes a read only memory storing predetermined sets of alphanumeric text messages directed to differing topics. The sets of predetermined alphanumeric text messages preferably include several positive affirmations directed to the left brain and an equal number of positive affirmations directed to the right brain that are alternately presented subliminally. The left brain messages are presented in a linear text mode, while the right brain messages are presented in a three dimensional perspective mode. The user can control the length and spacing of the subliminal presentations to accommodate differing conscious thresholds. Alternative embodiments include a combined cable television converter and subliminal message generator, a combine television receiver and subliminal message generator and a computer capable of presenting subliminal messages. SOURCE: Judy Wall, Mike Coyle and Jan Wiesemann. Paranoia Magazine Issue 24 Fall 2000 -Article - 'Technology to Your Mind' - By Judy Wall

Method and an Associated Apparatus for

Remotely Determining Information as to a Person's Emotional State

Patent Number: 5507291 Filed: April 5, 1994

Date Issued: April 16, 1996 Application: 08/222,835

Inventors: Stirbl; Robert C. (New York, NY)

Wilk; Peter J. (New York, NY)

A method for remotely determining information relating to a person's emotional state, comprising: generating waveform energy having a predetermined frequency and a predetermined intensity, the generating of said waveform energy being implemented at a location remotely spaced from a target individual; automatically monitoring the position of the individual; wirelessly transmitting said waveform energy towards the individual; detecting energy emitted from a predetermined point on the individual in response to the waveform energy; automatically tracking the location of said point; and automatically analyzing the emitted energy to derive information relating to the individual's emotional state.

Personal Tracking and Recovery System

Patent Number: 5629678 Filed: January 10, 1995 Date Issued: May 13, 1997 Application: 08/371,089

Inventors: <u>Gargano; Paul A.</u> (Belmont, MA) <u>Gilmore; David H.</u> (Cayman Kai, KY) <u>Pace; Frank A.</u> (Ballston Spa, NY) Weinstein; Lee (Somerville, MA)

Assignee: Gargano; Paul A. (Belmont, MA)

Apparatus for tracking and recovering humans utilizes an implantable transceiver incorporating a power supply and actuation system allowing the unit to remain implanted and functional for years without maintenance. The implanted transmitter may be remotely actuated, or actuated by the implantee. Power for the remote-activated receiver is generated electromechanically through the movement of body muscle. The device is small enough to be implanted in a child, facilitating use as a safeguard against kidnapping, and has a transmission range which also makes it suitable for wilderness sporting activities. A novel biological monitoring feature allows the device to be used to facilitate prompt medical dispatch in the event of heart attack or similar medical emergency. A novel sensation-feedback feature allows the implantee to control and actuate the device with certainty.

Intra-Oral Tracking Device

Patent Number: 5760692 Filed: October 18, 1996 Date Issued: June 2, 1998 Application: 08/730,906

Inventors: Block; Douglas A. (Manalapan, NJ)

An intra-oral tracking device adapted for use in association with a tooth having a buccal surface and a lingual surface, the apparatus comprises a tooth mounting member having an inner surface and an outer surface, the inner surface including adhesive material.

Electromagnetic Energy Directing Method and Apparatus

Patent Number: 5818649 Issue Date: October 6,1998

Inventors: Anderson; John E. (Corstorphine, Edinburgh, EH4 8DT, GB)

http://tinyurl.com/enbac

A method and apparatus for directing electromagnetic energy may be used as a directed energy weapon, illuminator for an active sensor and/or guidance system, counter-measure, or to ignite a fusion weapon; as a beam expander; for power transmission by a beam; propulsion by a beam or inertial fusion; power generation from inertial fusion; telecommunication; or computer hardware. The method and apparatus direct electromagnetic energy from a source made up of an area or volume as opposed to a point.

Magnetic Excitation of Sensory Resonances

Patent Number: 5935054 Filed: June 7, 1995

Date Issued: August 10, 1999 Application: 08/486,918

Inventors: Loos; Hendricus G. (Laguna Beach, CA)

The invention pertains to influencing the nervous system of a subject by a weak externally applied magnetic field with a frequency near 1/2 Hz. In a range of amplitudes, such fields can excite the 1/2 sensory resonance, which is the physiological effect involved in "rocking the

baby".

Engine Disabling Weapon

Patent Number: 5952600 Filed: February 24, 1997

Date Issued: September 14, 1999

Application: 08/806,014

Inventors: Herr; Jan Eric (San Diego, CA)

A non-lethal weapon for disabling an engine such as that of a fleeing car by means of a high

voltage discharge that perturbs or destroys the electrical circuits.

Acoustic Cannon

Patent Number: 5993999

Issue Date: November 30, 1999

Patent holder: AER Energy Resources, Inc. (Smyrna, GA)

http://tinyurl.com/pme9m

A current collector for an electrode with two halves. The current collector has a first layer positioned on the first half of the electrode, a second layer positioned on the second half of said electrode, and a third layer positioned between the first and the second halves of the electrode.

Speech Signal Processing for Determining Psychological or Physiological Characteristics Using a Knowledge Base

Patent Number: 6006188 Inventor: Bogdashevsky, et al. Date Issued: December 21, 1999

Application: 08/820,566 Filed: March 19, 1997

Inventors: Alexeev; Vladimir (Moscow, RU)

<u>Baker; George</u> (Los Alamos, NM) <u>Bogdashevsky; Rostislav</u> (Moscow, RU) Stanton; Harrison (Henderson, NV)

Yarigin; Vitaly (Moscow, RU)

Assignee: Dendrite, Inc. (Las Vegas, NV)

A speech-based system for assessing the psychological, physiological, or other characteristics of a test subject is described. The system includes a knowledge base that stores one or more speech models, where each speech model corresponds to a characteristic of a group of reference subjects. Signal processing circuitry, which may be implemented in hardware, software and/or firmware, compares the test speech parameters of a test subject with the speech models.

Methods and Formulations For Modulating the Human Sexual Response

Patent Number: 6051594

Inventor: Lowrey Filed: July 28, 1999

Date Issued: April 18, 2000 Application: 09/362,825

Inventors: Lowrey; Fred (Lincoln, NE)

Assignee: **Zonagen**, Inc. (The Woodlands, TX)

--The invention is directed to improved methods for modulating the human sexual response by orally administering a formulation of the vasodilator phentolamine to the blood circulation and thereby modulating the sexual response on demand.

Apparatus and Method of Broadcasting Audible Sound Using Ultrasonic Sound As a Carrier

Patent: 6052336 Filed: May 1, 1998

Date Issued: April 18, 2000 Inventor: Lowrey, III Application: 09/070,850

Inventors: Lowrey, III; Austin (Springfield, VA)

An ultrasonic sound source broadcasts an ultrasonic signal which is amplitude and/or frequency modulated with an information input signal originating from an information input source. If the signals are amplitude modulated, a square root function of the information input signal is produced prior to modulation. The modulated signal, which may be amplified, is then broadcast via a projector unit, whereupon an individual or group of individuals located in the broadcast region detect the audible sound.

Communication System and Method Including Brainwave Analysis and/or Use of Brain Activity

Patent Number: 6011991 Filed: December 7, 1998 Date Issued: January 4, 2000

Inventors: Mardirossian; Aris (Germantown, MD)
Assignee: Technology Patents, LLC (Derwood, MD)

A system and method for enabling human beings to communicate by way of their monitored brain activity. The brain activity of an individual is monitored and transmitted to a remote location (e.g. by satellite). At the remote location, the monitored brain activity is compared with pre-recorded normalized brain activity curves, waveforms, or patterns to determine if a match or substantial match is found. If such a match is found, then the computer at the remote location determines that the individual was attempting to communicate the word, phrase, or thought corresponding to the matched stored normalized signal.

Subliminal Acoustic Manipulation of Nervous Systems

Patent Number: 6017302 Date Issued: January 25, 2000

Inventors: Loos; Hendricus G. (Laguna Beach, CA)

http://tinyurl.com/otbfn

ABSTRACT: In human subjects, sensory resonances can be excited by subliminal atmospheric acoustic pulses that are tuned to the resonance frequency. The 1/2 Hz sensory resonance affects the autonomic nervous system and may cause relaxation, drowsiness, or sexual excitement, depending on the precise acoustic frequency near 1/2 Hz used. The effects of the 2.5 Hz resonance include slowing of certain cortical processes, sleepiness, and disorientation. For these effects to occur, the acoustic intensity must lie in a certain deeply subliminal range. Suitable apparatus consists of a portable battery-powered source of weak subaudio acoustic radiation. The method and apparatus can be used by the general public as an aid to relaxation, sleep, or sexual

arousal, and clinically for the control and perhaps treatment of insomnia, tremors, epileptic seizures, and anxiety disorders. There is further application as a nonlethal weapon that can be used in law enforcement standoff situations, for causing drowsiness and disorientation in targeted subjects. It is then preferable to use venting acoustic monopoles in the form of a device that inhales and exhales air with subaudio frequency.

Method and Device for Implementing The Radio Frequency Hearing Effect

Patent Number: 6470214

Filing Date: December 13, 1996 Issue Date: October 22, 2002 Inventor: O'Loughlin, et al.

BACKGROUND OF THE INVENTION

This invention relates to the modulating of signals on carriers, which are transmitted and the signals intelligibly recovered, and more particularly, to the modulation of speech on a carrier and the intelligible recover of the speech by means ofthe Radio Frequency Hearing Effect. The Radio Frequency ("RF") Hearing Effect was first noticed during World War II as a subjective "click" produced by a pulsed radar signal when the transmitted power is above a "threshold" level. Below the threshold level, the click cannot beheard.

The discovery of the Radio Frequency Hearing Effect suggested that a pulsed RF carrier could be encoded with an amplitude modulated ("AM") envelope. In one approach to pulsed carrier modulation, it was assumed that the "click" of the pulsedcarrier was similar to a data sample and could be used to synthesize both simple and complex tones such as speech. Although pulsed carrier modulation can induce a subjective sensation for simple tones, it severely distorts the complex waveforms of speech, as has been confirmed experimentally.

The presence of this kind of distortion has prevented the click process for the encoding of intelligible speech. An example is provided by AM sampled data modulation.

Upon demodulation the perceived speech signal has some of the envelope characteristics of an audio signal. Consequently a message can be recognized as speech when a listener is preadvised that speech has been sent. However, if the listener doesnot know the content of the message, the audio signal is unintelligible.

The attempt to use the click process to encode speech has been based on the assumption that if simple tones can be encoded, speech can be encoded as well, but this is not so.

A simple tone can contain several distortions and still be perceived as a tone whereas the same degree of distortion applied to speech renders it unintelligible.

Method and Apparatus for Locating and Tracking Persons

Patent Number: 7102508 B2 Issue Date: September 5, 2006

Inventor: Peter Seth Edelstein, Menlo Park, CA and Benjamin Theodore Nordell II, San Mateo, CA

- n The method and apparatus for locating and tracking a person is through an "implantable device," i.e., microchip.
- n The microchip can be used to locate missing or abducted persons, "runaways (missing

person classifications used by the U. S. Office of Juvenile Justice and Delinquency Prevention), . . incarcerated individuals, military personnel," etc.

- n The microchip is composed of "biocompatible" materials and can be implanted in "any limb, the torso, including back and perineum (the small triangular area of one's body that includes the anus and the vulva or the base of the penis), the neck, and the head." Interestingly, the microchip can also be implanted in any "naturally occurring orifice," such as the anus, the urethra, and the uterus. [The ear and nose were not mentioned but they are also "naturally occurring orifices."]
- n Each microchip "has either an internal or external power source." Those power sources can be "a rechargeable battery, an inductive charging system for charging the battery [by remote], a mechanical or heat sensitive voltage generator," etc. Each microchip also has an "individual identifier (similar to that of cellular telephones)," with each microchip HAVING AN INDIVIDUAL TELEPHONE NUMBER.
- n The microchip lies passive, or dormant, in the body until it receives an action signal, such as a telephone call, by the "system provider," in other words, the controller of the device. The chip can also remain continually active.

Using the Radio Frequency Hearing Effect Apparatus For Audibly Communicating Speech

Patent Number: 6587729 Filed: April 24, 2002 Date Issued: July 1, 2003 Application: 10/131,626

Inventors: Loree; Diana L. (Albuquerque, NM)

O'Loughlin; James P. (Placitas, NM)

Assignee: The United States of America as represented by the Secretary of the Air Force

(Washington, DC)

Primary Examiner: Schaetzle; Kennedy

Assistant Examiner:

Attorney Or Agent: Skorich; James M.

U.S. Class: 128/897; 332/167; 381/151; 600/586; 607/55

Field Of Search: 332/167; 381/151; 607/56; 607/55; 340/384.1; 600/559; 600/23; 600/586;

128/897; 128/898

International Class: A61N 1/08

U.S Patent Documents: 3563246; 3629521; 4835791; 5450044

BACKGROUND OF THE INVENTION

This invention relates to the modulating of signals on carriers, which are transmitted and the signals intelligibly recovered, and more particularly, to the modulation of speech on a carrier and the intelligible recover of the speech by means ofthe Radio Frequency Hearing Effect. The Radio Frequency ("RF") Hearing Effect was first noticed during World War II as a subjective "click" produced by a pulsed radar signal when the transmitted power is above a "threshold" level. Below the threshold level, the click cannot beheard.

The discovery of the Radio Frequency Hearing Effect suggested that a pulsed RF carrier could be encoded with an amplitude modulated ("AM") envelope. In one approach to pulsed carrier modulation, it was assumed that the "click" of the pulsedcarrier was similar to a data sample and

could be used to synthesize both simple and complex tones such as speech. Although pulsed carrier modulation can induce a subjective sensation for simple tones, it severely distorts the complex waveforms of speech, as has been confirmed experimentally.

The presence of this kind of distortion has prevented the click process for the encoding of intelligible speech. An example is provided by AM sampled data modulation

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The attempt to use the click process to encode speech has been based on the assumption that if simple tones can be encoded, speech can be encoded as well, but this is not so. A simple tone can contain several distortions and still be perceived as a tone whereas the same degree of distortion applied to speech renders it unintelligible.

Electronically and Remotely Controlled Pill and System for Delivering at Least One Medicament

Publication Date:02.03.2006 Issue Date: September 13, 2007 Application Number:11/574200 Pub. No.: WO/2006/021932

Assignee: KONINKLIJKE PHILIPS ELECTRONICS, N.V.

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NL 5621 BA

Inventors: Trovato; Karen I.; (Putnam Valley, NY); Spekowius; Gerhard; (Roetgen, DE) An electronically and remotely controlled pill (500) or medicament delivery system is provided. The pill (500) includes a housing (102); a medicament reservoir (104) for storing a medicament; an electronically controlled release valve or hatch (106) for dispensing one or more medicaments stored in the medicament reservoir (104) while traversing the gastrointestinal tract; control and timing circuitry (108) for opening and closing the valve (106); and a battery (109). The control and timing circuitry (108) opens and closes the valve (106) throughout a dispensing time period in accordance with a preset dispensing timing pattern which is programmed within the control and timing circuitry (108). RF communication circuitry receives control signals for remotely overriding the preset dispensing timing pattern, reprogramming the control and timing circuitry (108), or terminating the dispensing of the medicament within the body. The pill (500) includes an RFID tag (508) for tracking, identification, inventory and other purposes.

System and Method for Monitoring Individuals

Patent Number: 7272565 Filed: December 17, 2002

Date Issued: September 18, 2007

Inventor: Mardirossian Application: 10/320,706

Inventors: Mardirossian; Aris (Germantown, MD)
Assignee: Technology Patents LLC. (Derwood, MD)

Primary Examiner: Hudspeth; David Assistant Examiner: Sked; Matthew J.

Attorney Or Agent: Nixon & Vanderhye, PC U.S. Class: 704/273; 704/246; 704/251

Field Of Search:

International Class: G10L 11/00; G10L 15/00; G10L 17/00

U.S Patent Documents: 4773093; 5023901; 5621889; 5742233; 6141644; 6396954; 6480825; 6529881; 6697779; 6738784; 6799163; 6839410; 2002/0017999; 2002/0107694; 2002/0198731; 2003/0044050; 2003/0154084; 2003/0200311; 2004/0029564; 2004/0059923;

2004/0064453

Foreign Patent Documents: 63-253480

Abstract: A system and method for monitoring individuals using voice print matching to match monitored speech with stored voice prints is disclosed. Voice prints of individuals are obtained and stored in a central repository for use by authorized agencies or other entity that monitor voice communications. The digitized voice prints may be used to identify the speakers being monitored. If the conversation being monitored causes the monitor, based on their predetermined alert criteria, to suspect the speakers of illegal activity, such as, for example, terrorism, or otherwise cause the monitor to seek additional information about the speakers, the monitor may access information associated with the voice print and retrieve the information associated with those individuals so that this information may be passed along to the appropriate agency or organization for further action.

Holographic Arrays For Multi-Path Imaging Artifact Reduction

Patent Number: 7295146 Filed: March 24, 2005

Date Issued: November 13, 2007

Application: 11/088,470 Inventor: McMakin, et al

Inventors: McMakin; Douglas L. (Richland, WA)

Sheen; David M. (Richland, WA) Hall; Thomas E. (Kennewick, WA)

Assignee: Battelle Memorial Institute (Richland, WA)

Abstract:

A method and apparatus to remove human features utilizing at least one transmitter transmitting a signal between 200 MHz and 1 THz, the signal having at least one characteristic of elliptical polarization, and at least one receiver receiving the reflection of the signal from the transmitter.

A plurality of such receivers and transmitters are arranged together in an array which is in turn mounted to a scanner, allowing the array to be passed adjacent to the surface of the item being imaged while the transmitter is transmitting electromagnetic radiation. The array is passed adjacent to the surface of the item, such as a human being, that is being imaged. The portions of the received signals wherein the polarity of the characteristic has been reversed and those portions of the received signal wherein the polarity of the characteristic has not been reversed are identified. An image of the item from those portions of the received signal wherein the polarity of the characteristic was reversed is then created.

Method and Apparatus for Analyzing Thought System

Patent Number: 7440931

Filed: July 6, 2000

Date Issued: October 21, 2008 Application: 09/612,522

Inventors: Suzuki; Kazuhiko (Ota-Ku, JP) Assignee: Creative Brains, K.K. (Tokyo, JP)

ABSTRACT A method for analyzing a thought system of a subject consisting of at least one individual is disclosed. The analyzing method comprising the steps of: obtaining a plurality of items perceived by the subject; obtaining relationship information of all possible item pairs based on perception of the subject with respect to relationship between two items of each of said all possible item pairs; generating a relation matrix of the plurality of items based on the relationship information of each of the items with respect to the all other items; transforming the relation matrix to a display matrix projected on a representation space having dimensions lower than the number of the items and reflecting a relationship between the items perceived by the subject; and displaying the items on the representation space according to the display matrix such that the items are plotted on respective positions in the representation. An apparatus for analyzing a thought system of a subject which is adapted to perform the present analyzing method is also disclosed.