Alerta Tecnológico

INPI INSTITUTO NACIONAL DA PROPRIEDADE INDUSTRIAL

Pedidos de Patentes com Tecnologias Relativas a Deficiência Auditiva Total ou Parcial

Pedidos Publicados no

2º Semestre de 2008

Diretoria de Articulação e Informação Tecnológica – Dart
Centro de Divulgação, Documentação e Informação Tecnológica-Cedin
Divisão de Estudos e Programas – Diespro

Nº 2 – Maio de 2009

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ALERTA TECNOLÓGICO

O Instituto Nacional da Propriedade Industrial (INPI) é uma Autarquia Federal, vinculada ao Ministério do Desenvolvimento, Indústria e Comércio Exterior (MDIC), responsável pela concessão de patentes, registros de desenhos industriais, registro de marcas, averbação de contratos de transferência de tecnologia, registro de programas de computador, indicações geográficas e topografias de circuito integrado.

O Centro de Divulgação, Documentação e Informação Tecnológica (CEDIN), subordinado à Diretoria de Articulação e Informação Tecnológica (DART), mantém um acervo com a descrição dos pedidos de patente e de registro de desenhos industriais. Uma de suas atribuições é divulgar e disseminar a utilização destas informações bibliográficas e técnicas. Para tanto, o CEDIN dispõe da Divisão de Estudos e Programas – DIESPRO, cuja incumbência é elaborar publicações fundamentadas, essencialmente, em informações extraídas de documentos de patente.

A patente é uma importante fonte formal de informação, por meio da qual pode-se ter acesso a detalhes técnicos de invenções que, em alguns casos, não são descritos em livros nem em artigos técnicos.

O objetivo desta publicação, de periodicidade semestral, é o de alertar sobre os depositantes mais expressivos em determinado período, os países onde o primeiro depósito foi solicitado (país de prioridade), as áreas tecnológicas mais solicitadas e, divulgar os títulos dos pedidos de patentes publicados mundialmente em determinado período permitindo, desta forma, a atualização periódica de seu público alvo.

Esta publicação consiste de:

[1] Foram selecionados somente os primeiros documentos publicados de cada uma das famílias de patente. O conceito de família de patentes é bastante diversificado e varia de acordo com a base de dados na qual os documentos estão indexados. Em linhas gerais, todos os pedidos de patentes pertencentes a uma mesma família têm pelo menos um número de prioridade em comum.

[2] Conforme estabelecido pela Convenção de Paris (CUP) em seu Art. 4º, o primeiro pedido de patente depositado em um dos países membros da Convenção serve de base para depósitos subseqüentes relacionados à mesma matéria, efetuados pelo mesmo depositante ou por seus sucessores legais. Tem-se assim, o **Direito de Prioridade**. O prazo para exercer tal direito é de 12 meses, para invenção e modelo de utilidade. Ver art. 16, da Lei da Propriedade Industrial (LPI), nº 9.279/96 – disponível em www.inpi.gov.br.

Mais detalhes sobre cada pedido, bem como, cópia do documento completo podem ser obtidos nas seguintes bases de patente disponíveis gratuitamente na Internet:

1. Base Brasileira de Pedidos de Patente[3]: http://www.inpi.gov.br
2. Base do Escritório Europeu de Patentes[4]: http://ep.espacenet.com
3. Base do Escritório Americano de Patentes[5]: http://uspto.gov

Caso haja interesse em se conhecer o depósito de patente brasileiro correspondente (família do pedido de patente[1]), para algum(ns) dos pedidos de patente estrangeiros listados no Anexo I, sugere-se uma busca de família do mesmo. Neste caso, o Centro de Documentação do INPI – Cedin informará os procedimentos a serem seguidos, por meio do endereço abaixo.

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As cópias integrais dos pedidos de patente de interesse podem ser solicitadas por meio do endereço copdocpat@inpi.gov.br ou, por correio postal ao endereço acima.

[3] Esta base contém somente pedidos de patente depositados e publicados no Brasil a partir de 1982.
[4] Contêm pedidos de patente depositados e publicados em mais de 70 países.
[5] Contêm somente pedidos depositados e publicados nos Estados Unidos.

Pedidos de Patentes com Tecnologias Relativas a Deficiência Auditiva Total ou Parcial

A Secretaria Especial dos Direitos Humanos (SEDH), em especial a Coordenadoria Nacional para Integração da Pessoa Portadora de Deficiência (CORDE), juntamente com várias outras instituições e organizações vêm trabalhando para a identificação e divulgação de Tecnologia Assistiva[6] para portadores de deficiências.

Assim, o INPI vem, por meio do CEDIN, colaborar com a CORDE, facilitando o acesso ao público interessado às informações existentes no banco de patentes do INPI.

O objetivo do presente trabalho consiste em divulgar, a cada semestre, os pedidos de patente publicados sobre Tecnologia Assistiva, tais como, processos ou equipamentos para diagnosticar deficiências auditivas, próteses, equipamentos e utensílios desenvolvidos com a finalidade de solucionar dificuldades cotidianas de pessoas com deficiências de audição, entre outros.

Para o presente levantamento foram selecionados os documentos de patente contendo em seu título ou resumo uma das palavras-chave, a seguir: **surdo**, **surdez**, **deficiente auditivo** ou **deficiência auditiva** e pelo menos uma das classificações internacionais a seguir[7]:

A61B 5/12 - Audiometria;

A61F 11/04 - Dispositivos ou métodos permitindo aos pacientes substituírem a percepção auditiva direta por outra espécie de percepção;

A61F 2/18 - Próteses implantáveis no interior do corpo. Partes internas do ouvido ou nariz;

G02C 11/06 - Acessórios de audição;

G09B 21/04 - Dispositivos para conversar com os surdos/cegos;

G09B 21/06 - Dispositivos para ensino da leitura pelo movimento dos lábios;

[6] A Tecnologia Assistiva, também conhecida como "ajuda técnica", se refere a tecnologias desenvolvidas para dar independência, autonomia ou facilitar o cotidiano de pessoas com deficiências.
[7] Um documento de patente pode conter uma ou mais classificações.

G10L 15/24 - Reconhecimento de voz utilizando características não acústicas, por ex., posição dos lábios;

H04R 25/00 - Aparelhos para surdez;

H04R 25/02 - Aparelhos para surdez adaptados para serem sustentados inteiramente pela orelha;

H04R 25/04 - Aparelho para surdez compreendendo amplificadores de bolso.

Classificação Internacional de Patentes – CIP

O sistema da Classificação Internacional de Patentes resultou dos esforços conjuntos de órgãos de propriedade industrial de vários países, com o objetivo de dispor, de forma organizada e padronizada, os documentos de patente, a fim de facilitar o acesso (busca) às informações tecnológicas e legais contidas nesses documentos.

O Acordo de Estrasburgo relativo à Classificação Internacional de Patentes, concluído em 1971, entrou em vigor em 1975 e é administrado pela Organização Mundial da Propriedade Intelectual (OMPI). Qualquer país membro da Convenção da União de Paris pode se tornar membro do Acordo de Estrasburgo.

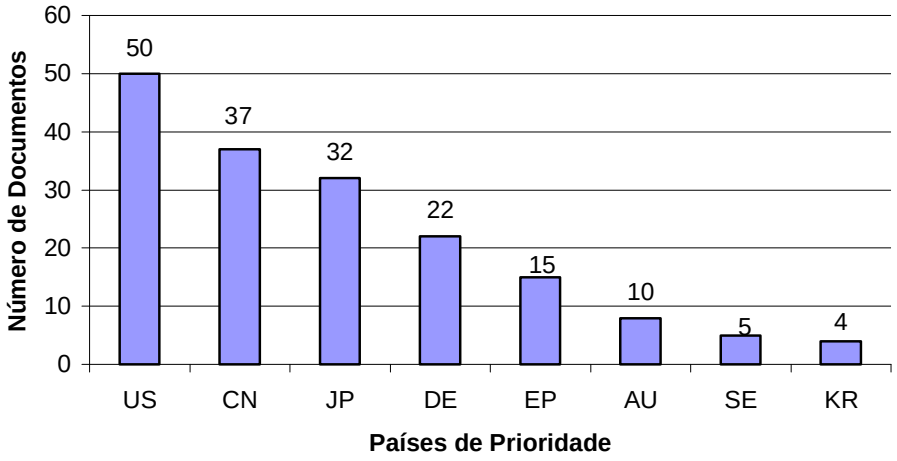
Em julho de 2008, 58 Estados eram parte do Acordo de Estrasburgo, no entanto mais de 100 escritórios nacionais, 4 escritórios regionais e a Secretaria da OMPI, atuando como escritório receptor do Tratado de Cooperação em Patentes (PCT), também utilizavam a Classificação Internacional de Patentes (CIP).

A edição atual da CIP (8ª edição) entrou em vigor em 01/01/2006 e está disponível no *site* da OMPI: http://www.wipo.int/classifications/ipc/ e no *site* do INPI: http://pesquisa.inpi.gov.br/ipc/index.php .

Resultados

O gráfico 1 permite a identificação dos países* de prioridade dos documentos recuperados no período e a ocorrência em cada país.

Gráfico 1: Países de Prioridade dos Documentos Recuperados x Número de Documentos



Fonte: Elaboração própria a partir da banco de dados EPOQUE[8]

De acordo com o gráfico 1 os cinco principais países de prioridade são:

US – Estados Unidos da América

CN – China

JP – Japão

DE – Alemanha

EP – Escritório Europeu de Patentes

AU – Austrália

SE - Suécia

KR – Coréia

* A lista com os códigos dos países está disponível no Anexo I.

[8] O banco de dados EPOQUE é disponibilizado ao INPI, via acesso remoto, pelo Escritório Europeu de Patentes.

Na tabela 1, a seguir, são identificados os depositantes com maior número de pedidos de patente publicados no período e seus respectivos países de prioridade.

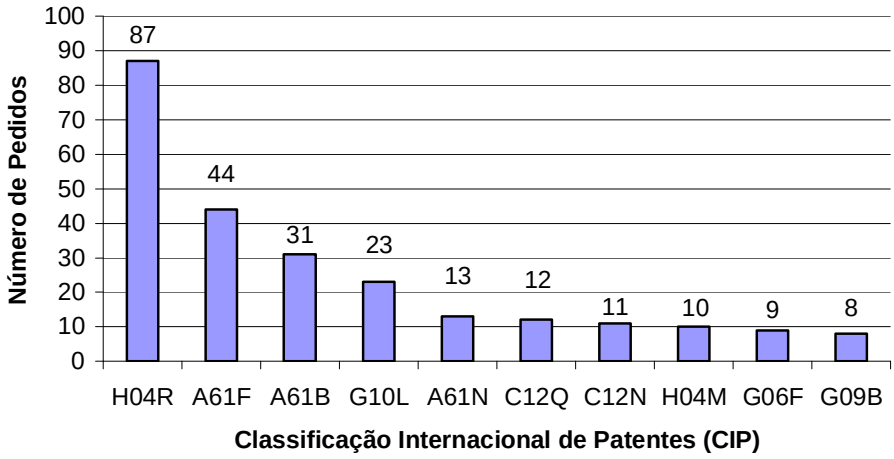
Tabela 1: Relação dos principais depositantes, seus respectivos países de prioridade e nº de pedidos de patentes publicados no 2º semestre de 2008

Nome do Depositante	Prioridade	Total de Documentos
COCHLEAR LTD	AU DE EP SE US WO	10
STARKEY LAB INC	US	8
WIDEX AS	CN DK EP JP WO	8
GEN HOSPITAL OF PLA	CN	6
CHINESE PLA GENERAL HOSPITAL	CN	5
PHONAK AG	US WO	5
RION CO	JP	5
HEINZ KURZ GMBH MEDIZINTECHNIK	DE	4
SIEMENS MEDICAL INSTR PTE LTD	DE EP	4
JOHNSON & JOHNSON CONSUMER	US WO	3
KONINKL PHILIPS ELECTRONICS NV	EP WO	3
SICHUAN MICRO DSP DIGITAL TECH	CN	3
SIEMENS AUDIOLOGISCHE TECHNIK	DE	3
SIEMENS HEARING INSTR INC	US	3

Fonte: Elaboração própria a partir da banco de dados EPOQUE.

No gráfico 2 são apresentadas as principais classificações contidas nos documentos encontrados na pesquisa. Estas classificações permitem o monitoramento das tecnologias relacionadas ao tema, descritas nos pedidos de patente publicados no período.

Gráfico 2: Número de Pedidos de Patentes Publicados sobre Tecnologias relativas a Deficiência Auditiva Total ou Parcial (2º semestre de 2008) x Classificação Internacional de Patentes (CIP)



H04R - Aparelhos para surdez

A61F - Próteses; Métodos ou dispositivos para tratamento dos ouvidos

A61B - Detecção, medição ou registro para fins de diagnóstico

G10L – Análise, síntese e reconhecimento da fala

A61N – Instrumentos para terapia

C12Q – Processos de medição ou ensaio envolvendo enzimas ou microorganismos

C12N – Engenharia genética e suas mutações

H04M - Comunicação telefônica

G06F – Processamento elétrico de dados digitais

G09B – Material para ensino ou comunicação

Tabela 2:

Dados bibliográficos dos pedidos de patente publicados no 2º semestre de 2008.

(Por ordem alfabética do nome do depositante)

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
WO2008098258	US - 20070888986P - 09/02/2007	ABLE PLANET INC ; SEMCKEN KEVIN R ; SCHWEITZER H CHRISTOPHER	H04R 25/00	An electroacoustical apparatus and method is described that alters the output properties of an audio device to improve the sound properties for both hearing impaired and normal hearing listeners. The device includes a coil element of specific design and may incorporate digital signal processing techniques to modify audio signal output. The electrical device and method of processing provides for the beneficial alteration of sound waves to an audio signal, and further modification of the audio signal to provide for improved loudness and clarity characteristics. The improved characteristics provide for greater intelligibility of the audio signal to persons with hearing impairments and to persons with normal hearing.
US7415120	US - 19990673275 - 14/04/1999 ; US - 19980059307 - 14/04/1998 ; US - 19980059303 - 14/04/1998 ; US - 19980059304 - 14/04/1998 ; US - 19980109506P - 23/11/1998 ; WO - 1999US08055 - 14/04/1999	AKIBA ELECTRONICS INST LLC	H03G 3/00	A method for processing audio signals optimizes the listening experience for ---hearing--- ---impaired--- listeners, as well as non----hearing--- ---impaired--- listeners, without forcing ---hearing--- ---impaired--- individuals to feel stigmatized by requiring them to employ special ---hearing-------impaired--- equipment. A user actuated controller controls a mixture of a preferred audio signal and a remaining audio signal across a range sufficiently wide enough to encompass all individuals. The preferred audio is recorded and maintained separate from all remaining audio and delivered to the listener in a manner that maintains the separateness of the preferred audio and the remaining audio. The user actuated controller includes the capability of automatically maintaining the listener established ratio in the face of changes in the audio signal. The user actuated controller enables the user to specify a range about the ratio in which the audio may vary, which permits the listener to expand the audio across a continuous range to whatever dynamic range his hearing can accommodate. The controller automatically adjusts to changes in incoming audio. The controller can react to relatively slowly moving changes or prevent short bursts of sound in the remaining audio from modifying the signal levels. The combination of the above aspects provides a heretofore not possible listening experience that can accommodate the listening desires of all listeners. The combination of the ability to control the ratio of preferred audio to remaining audio and to specify the dynamic range about the ratio in which the audio may vary, coupled with the ability of the controller to automatically adjust the signal levels in response to sudden changes in incoming audio, provides a powerful user capability that truly optimizes the listening experience for any listener.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
FR2917562	FR - 20060010923 - 15/12/2006	ALLART DE HEEES HERVE	H04R 1/02	Le dispositif comprend un caisson qui comporte une paroi de fond pleine (1), une paroi latérale périphérique pleine (2) ayant un bord proximal (3) et un bord distal (4), ladite paroi de fond (1) étant solidarisée audit bord proximal (3) et une paroi de façade non-pleine (7) fermant ledit caisson au niveau dudit bord distal (4) de sorte qu'une enceinte (8) est délimitée par lesdites parois (1,2,7), enceinte dans laquelle est montée une plaque flexible formant membrane de haut-parleur (9).Selon l'invention, une boucle à induction magnétique (10) est montée sur ladite paroi latérale (2) à l'extérieur de ladite enceinte (8).
US2008228101	US - 20080046012 - 11/03/2008 ; US - 20070894432P - 12/03/2007	ALLEN JONT B ; JENG PATRICIA S	A61B 5/12	Method and System for characterizing an incident pressure wave in a hearing test. The method includes introducing a sound signal of a predetermined frequency and amplitude into an ear canal, measuring at least a sound pressure level (Pm) in the ear canal, processing information associated with the sound pressure level, obtaining at least an acoustic reflectance (R) based on information associated with the sound pressure level, and determining an incident wave pressure parameter (P+) in the ear canal according to the following formula: <maths id="MATH-US-00001" num="00001"> <MATH OVERFLOW="SCROLL"> <MROW> <MSUB> <MI>P</MI> <MO>+</MO> </MSUB> <MO>=</MO> <MROW> <MFRAC> <MSUB> <MI>P</MI> <MI>m</MI> </MSUB> <MROW> <MN>1</MN> <MO>+</MO> <MI>R</MI> </MROW> </MFRAC> <MO>.</MO> </MROW> </MROW> </MATH> </MATHS>
CN101252957	US - 20050696167P - 30/06/2005	ANTHROGENESIS CORP	A61L 27/24 ; A61F 2/18 ; A61L 31/04	The present invention provides a method of repairing a tympanic membrane deformity, such as a tympanic membrane perforation, commonly referred to as tympanoplasty or myringoplasty, using a collagen biofabric. The collagen biofabric is preferably laminated. The invention further provides kits comprising one or more pieces of collagen biofabric, for example laminated collagen biofabric, for the repair of a tympanic membrane.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
JP2008242067	JP - 20070082411 - 27/03/2007	ATR ADVANCED TELECOMM RES INST	G10L 15/20 ; G10L 15/00 ; G10L 15/06 ; G10L 15/24 ; G10L 21/02	PROBLEM TO BE SOLVED: To eliminate a decrease in recognition rate even after movement to a plurality of places where different background noises are present. - SOLUTION: A voice recognition system 10 includes a server 12 to which a plurality of databases are connected. In the databases, noise models generated correspondingly to a plurality of places are stored while being associated with the places. Further, a plurality of relays 16 and a communicable mobile terminal 18 are connected to the server 12 through a network 14. The mobile terminal 18 acquires an input voice including the voice of an examinee and transmits voice data to a relay 16. The relay 16 adds its ID to the voice data and transmits them to the server 12. The server 12 specifies the installation place of the relay 16 on the basis of the ID and estimates the place as the current position of the examinee. Then the voice of the examinee is recognized by using a noise model corresponding to the current position. Therefore, the noise models corresponding to the plurality of places are prepared and then a noise included in the input voice can suitably be suppressed to accurately perform voice recognition. - COPYRIGHT: (C)2009,JPO&INPIT
US2008221719	US - 20070681979 - 05/03/2007	AUDIOLOGY INC	A61B 5/12 ; G06F 17/40 ; G06F 19/00	An audiogram classification system is provided. The classification system includes categories for configuration, severity, site of lesion and/or symmetry of an audiogram. A set of rules can be provided for selecting the categories, wherein the set of rules ignore one or more local irregularities on an audiogram and have been validated to maximize agreement with judges.
CA2582513	CA - 20072582513 - 22/03/2007	BAKER JEFFREY	G09B 19/00 ; G09B 5/00 ; G09B 21/00 ; H05B 37/02	A method of using lights and a light system for teaching dance, particularly to students with ---hearing--- ---impairments---. The method of dance instruction includes a light bar having a plurality of first lights and second lights. The first and second lights are visually distinguishable. The first lights are turned on and off to display a pre-selected time signature pattern, and the second lights of the light bar are turned on and off to display a pre-selected and count time signature pattern. A light system for dance instruction includes a light bar having a first lights and second lights, which are visually distinguishable, and a control unit for: a) turning the first lights of the light bar on and off to display a pre-selected time signature pattern; and b) turning the second lights of the light bar on and off to display a pre-selected and count time signature pattern.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
AT407622T	US - 20000205469P - 19/05/2000 ; US - 20000247999P - 14/11/2000 ; US - 20010287387P - 01/05/2001	BAYCREST CT FOR GERIATRIC CARE	A61B 5/0484 ; A61B 5/12	This invention relates to an apparatus and method for assessing a subject's hearing by recording steady-state auditory evoked responses. The apparatus generates a steady-state auditory evoked potential stimulus, presents the stimulus to the subject, senses potentials while simultaneously presenting the stimulus and determines whether the sensed potentials contain responses to the stimulus. The stimulus may include an optimum vector combined amplitude modulation and frequency modulation signal adjusted to evoke responses with increased amplitudes, an independent amplitude modulation and frequency modulation signal and a signal whose envelope is modulated by an exponential modulation signal. The apparatus is also adapted to reduce noise in the sensed potentials by employing sample weighted averaging.; The apparatus is also adapted to detect responses in the sensed potentials via the Phase weighted T-test or Phase zone technique. The apparatus may further perform a number of objective audiological tests including latency tests, AM/FM discrimination tests, rate sensitivity tests, aided hearing tests, depth sensitivity tests, supra-threshold tests and auditory threshold tests. The apparatus is further adapted to perform multi-modality testing in which more than one sensory modality of the subject is tested simultaneously.
WO2008151734	EP - 20070011535 - 13/06/2007	BAYER HEALTHCARE AG ; SANDNER PETER ; HUETTER JOACHIM	A61K 31/00 ; C12Q 1/44	L'invention concerne des compositions pharmacologiques comprenant des inhibiteurs de la PDE-5 destinés au traitement des troubles de l'audition c'est-à-dire une perte d'audition et un acouphène. L'invention concerne également le criblage de ces inhibiteurs de la PDE-5 destinés à être utilisés dans la préparation de médicaments permettant de traiter les troubles de l'audition c'est-à-dire une perte d'audition et un acouphène.
CN101241024	CN - 20081101192 - 29/02/2008	BEIJING UNION UNIVERSITY	G01H 11/08 ; G08B 7/06 ; H03K 5/24	The invention discloses a voice triggered warning system used by the ---deaf---, which comprises: the audio frequency amplifier, which enlarges received voice signal; the signal processing circuit, which filtering plastics the amplified signal outputted by the audio frequency amplifier; the trigger circuit, which decides whether to change output electrical-level according to the filtering plastic signal whether to exceed threshold value; the alarm device, which sends out alarm signals according to signals outputted by trigger circuit; the power, which supplies power to system. The voice triggered warning system can start to vibrate automatically when vehicles whistling, thus reminding timely the ---deaf--- to have vehicles near, not only reducing effectively the risk of traffic accidents, but also providing a convenient travel for the ---deaf---.
DE202008009213U	DE - 200820009213U -09/07/2008	BICKERT VIKTOR	G09B 21/04	Das Bluetooth-Stumm-Kommunikationssystem

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
WO2008086085	US - 20070878111P - 03/01/2007 ; US - 20070878366P - 04/01/2007	BIOSECURITY TECHNOLOGIES INC ; LENHARDT MARTIN L	H04R 25/00	Selon l'invention, la parole est modulée et traitée afin de produire un signal qui est intelligible dans des environnements très bruyants. Aussi, l'invention concerne un dispositif (et un procédé d'utilisation dudit dispositif) permettant d'améliorer la perception de signaux acoustiques comprenant des motifs non vocaux tel que de la musique. Ledit dispositif utilise des porteuses haute fréquence conjointement à une modulation du signal. Enfin, un signal contenant des informations acoustiques est présenté à une personne qui écoute à l'aide de multiples modalités comprenant une perception ultrasonore par démodulation cérébrale, conduction aérienne, ainsi que par stimulation tactile afin d'obtenir une perception de son améliorée.
WO2008096253	IT - 2007MI00197 - 05/02/2007	BTICINO SPA ; SANTINI ERNESTO ; BERNASCONI DANILO	G09B 21/00 ; H04M 9/00 ; H04N 7/14	L'invention concerne un interphone extérieur (11) ou intérieur (18) et/ou un système d'entrée de porte vidéo doté(s) d'équipements destinés à des personnes présentant des capacités visuelles, auditives et verbales limitées. L'invention comprend au moins l'un des éléments suivants : un clavier (15, 22), un écran ou un affichage de visualisation (13, 20), un haut-parleur (10, 17), une télécaméra (12, 19), un capteur de présence et un microphone (16, 23). Outre leurs fonctions de vidéocommunication normales, de tels systèmes (11, 18) peuvent générer des informations et des signaux visuels et acoustiques, de sorte qu'il peuvent être utilisés indifféremment par des personnes valides et par des personnes présentant des handicaps de différents degrés, en particulier des personnes présentant des capacités visuelles, auditives et verbales limitées, et également des aveugles, des sourds et des muets.
EP2001365	WO - 2007US05373 - 28/02/2007 ; US - 20060777778P - 01/03/2006	CABOT SAFETY INTERMEDIATE CORP	A61B 5/12	An interface adapted for use with an audiometer, including a digital wireless interface supported by a base unit and a remote unit wherein the base unit receives signals from the audiometer and provides the signals to the remote unit via the digital wireless interface.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
DE102007026219	DE - 200710026219 - 05/06/2007	CARL VON OSSIETZKY UNI OLDENBU	A61B 5/12 ; H04S 1/00	The invention relates to an audiological measuring instrument for generating acoustic test signals for audiological measurements. Said measuring instrument comprises: - a room loudspeaker arrangement (1, 2) for supplying at least two acoustic signals in at least two measurement positions encompassing a first measurement position (M1) and a second measurement position (M2); - a means (4) for generating control signals (S1, S2) that can be converted into a first acoustic signal and a second acoustic signal. A predefined acoustic test signal can be generated by supplying exclusively the first acoustic signal in the first measurement position (M1) and exclusively the second acoustic signal in the second measurement position (M2); - a crosstalk compensating device which processes the control signals (S1, S2) during operation in such a way and feeds the same to the room loudspeaker arrangement (1, 2) in such a way that the predefined test signal is generated in the first and second measurement position (M1, M2).
CN201154006Y	CN - 20082079030U - 28/02/2008	CHINESE PLA GENERAL HOSPITAL	A61F 2/28 ; A61F 2/18	The utility model discloses an artificial incus, which includes a malleus connecting end, a link rod, and a stapes connecting end. The malleus connecting end of the artificial incus is a forklike head, can be stuck on the malleus handle, and can ensure that the aritificial incus has better stability and is not easy to dislocate after being implanted. The stapes connecting end is a cup cover with elliptic underside, is more suitable for the physiological shape of the stapes head, and ensures the connection of the artificial incus with the stapes to be more firm with better sound transmitting performance. The link rod connects the malleus connecting end with the stapes connecting end by the manner of sleeve so as to facilitate length adjustment according to the actual operation requirements.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
CN201160922Y	CN - 20082078991U - 05/02/2008	CHINESE PLA GENERAL HOSPITAL	A61F 2/18	The utility model discloses an artificial tympanic ring which is a circular ring with a gap. Through simulating the shape of the tympanic ring, the artificial tympanic ring can be blocked into a simulating tympanic groove or the wall of the external auditory canal. A transplanted artificial tympan and a dermatome are compressed causing an implant to be tightly healed up with the bone wall at the compressed position, or putrescence occurs after the compression to form a scar heal, thereby replacing the function of a fiber tympanic ring. The size of the circular ring can be adjusted through a gap on the circular ring so as to adapt the sizes of different auditory canals and facilitate blood vessels, nerves, pedicle flaps, etc. at the blocking and compressing part to pass through from the gap to avoid being pressed. Handles at both ends of the gap of circular ring enable the placing and taking-out of the artificial tympanic ring to be more convenient. The handles face to the inner side of the circular ring, so the handle can not influence the tight joint of the artificial tympanic ring and the wall of the auditory canal.
CN101230395	CN - 20081007302 - 22/12/2005	CHINESE PLA GENERAL HOSPITAL	C12Q 1/68 ; C12N 15/11	The invention relates to a detecting method, which detects whether the SLC26A4 genetic mutation exists in the individual sample to be detected, and diagnoses the generation and the type of the large vestibular aqueduct in the individual to be detected; wherein, the SLC26A4 genetic mutation is 109G being larger thanT heterozygous mutation on the exon 2 of SLC26A4 gene. The invention further relates to a reagent kit for detecting whether the SLC26A4 genetic mutation exists in the individual sample to be detected, and the application of the SLC26A4 gene in diagnosing and/or treating the large vestibular aqueduct related diseases. The genetic mutation and detecting method are favorable for the screening the SLC26A4 genetic mutation in the ---deaf--- people, and diagnose and treat the ---deaf--- people.
CN101230396	CN - 20081007303 - 22/12/2005	CHINESE PLA GENERAL HOSPITAL	C12Q 1/68 ; C12N 15/11	The invention relates to a detecting method, which detects whether the SLC26A4 genetic mutation exists in the individual sample to be detected, and diagnoses the generation and the type of the large vestibular aqueduct in the individual to be detected; wherein, the SLC26A4 genetic mutation is 589G being larger than A heterozygous mutation on the exon 5 of SLC26A4 gene. The invention further relates to a reagent kit for detecting whether the SLC26A4 genetic mutation exists in the individual sample to be detected, and the application of the SLC26A4 gene in diagnosing and/or treating the large vestibular aqueduct related diseases. The genetic mutation and detecting method are favorable for the screening the SLC26A4 genetic mutation in the ---deaf--- people, and diagnose and treat the ---deaf--- people.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
CN101230397	CN - 20081007346 - 22/12/2005	CHINESE PLA GENERAL HOSPITAL	C12Q 1/68 ; C12N 15/11	The invention relates to a detecting method, which detects whether the SLC26A4 genetic mutation exists in the individual sample to be detected, and diagnoses the generation and the type of the large vestibular aqueduct in the individual to be detected; wherein, the SLC26A4 genetic mutation is 281C being larger than T heterozygous mutation on the exon 3 of SLC26A4 gene. The invention further relates to a reagent kit for detecting whether the SLC26A4 genetic mutation exists in the individual sample to be detected, and the application of the SLC26A4 gene in diagnosing and/or treating the large vestibular aqueduct related diseases. The genetic mutation and detecting method are favorable for the screening the SLC26A4 genetic mutation in the ---deaf--- people, and diagnose and treat the ---deaf--- people.
AT412328T	AU - 2000PQ08205 - 19/06/2000	COCHLEAR LTD	A61F 11/00 ; H04R 25/00 ; A61F 2/18 ; A61F 11/04 ; A61N 1/36	The sound processor and method uses a model of basilar membrane motion to select stimuli, based upon the predicted motion which the acoustic signal presented would produce in an acoustically excited normally hearing cochlea. The filters used, in contrast to single channel per electrode approaches, cover multiple channels and overlap with each other. Consequently, the stimuli presented produce a neural excitation pattern which approximates the spatio-temporal travelling wave observed on the basilar membrane in an acoustically excited normally hearing cochlea. Preferably, the predicted electrode stimuli are based upon the instantaneous predicted amplitude of the electrode location.
AT416748T	EP - 19990923315 - 21/05/1999 ; WO - 1999AU00391 - 21/05/1999	COCHLEAR LTD	A61F 11/00 ; A61F 11/04 ; A61F 2/18 ; A61L 27/00 ; A61M 25/01 ; A61N 1/05 ; A61N 1/375	An electrode array for a cochlear implant is formed with a carrier made, for example from silicone, is preshaped and is formed with a lumen. The array is shaped to assume a first. The array can be straightened, and held in a straight configuration by inserting a stylet into the lumen. The array relaxes to a shape matching the curvature of the cochlea when the lumen is removed. The electrodes of the array are disposed on one side of the array to face the modiolus when the array is inserted into the cochlea.
AT401758T	DE - 19991015846 - 08/04/1999	COCHLEAR LTD	H04R 25/00 ; A61F 11/04	Partially implantable system for rehabilitating hearing trouble includes a cordless telemetry device to transfer data between an implantable part, an external unit and an energy supply. Equipment (10,40,80,130,150) for processing and generating signals has an implantable processor (141) with a programmed controller and an implantable memory (S1,S1') for storing operating parameters. A cordless telemetry device (125) transfers data between the implantable part, an external unit (120) and an energy supply (60).

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
AU2008212014	AU - 20030205441 - 28/02/2003 ; AU - 20080212014 - 04/09/2008	COCHLEAR LTD	A61N 1/05 ; A61F 2/18 ; A61F 11/00 ; H04R 25/00	A cochlear implant electrode assembly device comprising an elongate electrode carrier member (10) that has a chamber or lumen (14) for receiving a bioactive fluid that is delivered therein, and a fluid transfer connector (50) that is in fluid communication with the chamber (14) and through which a bioactive fluid can move from a location external the carrier member, such as a reservoir (23), to the chamber (14).
AU2001272189B	WO - 2001AU00811 - 06/07/2001	COCHLEAR LTD	A61F 11/00 ; A61F 2/18 ; A61N 1/08 ; A61N 1/362 ; A61N 1/372	An arrangement for implanted medical devices in which the implant (20) includes certain parameters (21) stored in memory. Upon initialisation, these parameters are downloaded to the external component (30). This allows for simpler changes to the external device, or for a generic external device to be used. A particular application is to Cochlear implants.
SE0701244	SE - 20070001244 - 24/05/2007	COCHLEAR LTD	A61F 11/04 ; H04R 25/00	The present invention relates to a percutaneous implant abutment for bone anchored implant devices adapted to be anchored in the craniofacial region of a person, such as bone anchored hearing aids. The abutment comprises a skin penetration body having a skin contacting surface. The skin contacting surface has been modified in such a way that the shear modulus of the skin contacting part of the percutaneous ly implant abutment is reduced to less than 35 GPa. Preferably the surface of the skin contacting part of the percutaneous ly implant abutment is coated with a bio- compatible polymer or a ceramic material with a thickness of 0.001-50 [mu]m. As an alternative, or in combination, an enlargement treatment can be provided to the surface re not sulting in a 10 % surface increase and a roughness value Sa of 0.5-10 [mu]m. By such surface modifications specific adverse skin reactions are reduced.
US2008304686	US - 20080131867 - 02/06/2008 ; US - 20070924800P - 31/05/2007 ; US - 20070924807P - 31/05/2007	COCHLEAR LTD	H04R 25/02	A BTE prosthetic device for use in a medical system or prosthesis comprises a connector configured to mechanically attach an auxiliary device of the system to the BTE prosthetic device. The connector is electrically connected to an transceiver of the BTE prosthetic device. The connector operates as an electromagnetic antenna for transmitting and/or receiving signals between the BTE prosthetic and other components of the medical system.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
WO2008143575	SE - 20070001243 - 24/05/2007	COCHLEAR LTD ; ASNES KRISTIAN	H04R 25/00 ; A61F 2/02 ; A61F 11/04	L'invention porte sur un élément d'ancrage pour un ancrage permanent de prothèses extra orales, telles que des dispositifs de prothèse auditive ancrés dans l'os ou d'autres types de prothèses cranio-faciales, telles que des prothèses d'oreille ou orbitales ancrées dans l'os du crâne d'un patient, et également des prothèses de doigt ou similaires. L'élément d'ancrage comprend une partie centrale (1) en forme de vis devant être introduite dans l'os du crâne et une bride (5) qui fonctionne en tant que butée à l'encontre de la surface osseuse lorsque l'élément d'ancrage est installé dans l'os du crâne. L'élément d'ancrage est caractérisé par une partie centrale (1) en forme de vis, qui est reliée avec une partie périphérique, tubulaire (10) par l'intermédiaire de ladite bride (5), de telle sorte que la partie tubulaire conjointement avec la partie centrale (1) sont agencées pour un découpage dans le tissu osseux lorsque l'élément d'ancrage est installé dans l'os du crâne. De cette manière, l'élément d'ancrage forme une géométrie en dents de scie en forme de disque plat dans laquelle l'extension de la couche d'os du crâne comparativement mince est plus efficacement utilisée pour l'ancrage par comparaison avec les dispositifs d'ancrage à vis traditionnels.
WO2008113137	AU - 20070901517 - 22/03/2007	COCHLEAR LTD ; BUSBY PETER ANDREW	H04R 25/00 ; A61F 11/04 ; G10L 21/02 ; H04R 27/02	La présente invention concerne un agencement selon lequel une prothèse auditive, telle qu'un implant cochléaire, peut sélectionner des entrées de réception parmi une pluralité de microphones, disposés par exemple de part et d'autre de la tête d'un utilisateur. En fonction d'un paramètre de signal tel que le rapport signal/bruit, un signal ou un mélange des signaux est utilisé comme une base pour la stimulation de l'utilisateur.
WO2008089505	AU - 20070900299 - 22/01/2007	COCHLEAR LTD ; DALTON JAMES	A61N 1/375 ; A61F 11/04 ; A61M 1/00	L'invention concerne un composant implantable (500) ayant deux surfaces d'interface et des moyens (530) entre les surfaces pour les espacer. L'invention trouve une application particulière dans les implants cochléaires. Dans un second mode de réalisation, un implant cochléaire a des première et seconde bobines sur des composants respectifs de l'implant et la seconde bobine se trouve à l'intérieur de la première bobine. Un troisième mode de réalisation comprend des moyens entre deux interfaces d'un implant cochléaire pour sceller les interfaces ensemble. Un quatrième mode de réalisation est destiné à un composant d'implant cochléaire avec une première bobine et un canal dans le composant qui s'aligne sur la bobine. Un fil conducteur introduit dans le canal forme une seconde bobine. Un dernier mode de réalisation est destiné à un ensemble de pompage in vivo avec un élément magnétiquement actif pour pomper du fluide in vivo.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
US2008249589	US - 20080037323 - 26/02/2008 ; US - 20070891582P - 26/02/2007	CORNEJO CRUZ JUAN MANUEL ; GRANADOS TREJO MARIA DEL PILAR	A61N 1/36 ; A61B 5/12 ; A61F 11/04 ; H04R 25/00	This invention relates to a method and apparatus for obtaining and registering the Electrical Cochlear Response ("ECR"). Particularly, the ECR refers to the electrical activity of the auditory nerve and the intracochlear residual tissue located in the neighborhood of an intracochlear stimulation electrode, when an external sound is presented to a Cochlear Implant user, human or animal. Applicants recognize that an ECR can be thought of as a far-field electrical potential registered on the scalp of an implanted patient. Applicants, through their method and apparatus, can extract that potential from the patient's spontaneous electroencephalographic activity (EEG) and measure it by using an averaging algorithm. The Electrical Cochlear Response can be applied for adaptation, calibration, performance evaluation and failure detection of the Cochlear Implant of the implanted patient. Also Applicants' method can be applied to estimate the audiometric thresholds of the Cochlear Implant even without the implanted patient's knowledge.
US2008267361	US - 20070789564 - 25/04/2007	DILEO WALTER R	H04M 11/00	A public phone with enhanced communications services for the ---hearing--- ---impaired--- and hard of hearing.
WO2008100503	US - 20070900821P - 12/02/2007	DOLBY LAB LICENSING CORP ; MUESCH HANNES	G10L 19/14 ; G10L 21/02	La présente invention se rapporte à une amélioration du traitement de signaux audio et de la parole. Selon un de ses aspects, l'invention combine un programme audio de haute qualité - qui est un mélange de données audio de parole et de données audio non de parole - à une copie de qualité inférieure des composantes de paroles contenues dans le programme audio, dans le but de générer un programme audio de grande qualité doté d'un rapport amélioré entre des données audio de parole et des données audio non de parole, qui soit à même de présenter des avantages pour des personnes âgées, des personnes handicapées auditives (malentendants), ou d'autres auditeurs. Des aspects de l'invention sont particulièrement utiles dans le cadre de la télévision et du = cinéma maison =, bien qu'ils puissent également être applicables à d'autres applications audio et sonores. L'invention concerne des procédés, des appareils mettant en oevre ces procédés, ainsi qu'un programme informatique enregistré sur un support lisible par un ordinateur destiné à permettre à un ordinateur de mettre en oevre ces procédés.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
ES2303073T	SE - 20030001588 - 30/05/2003	ENTIFIC MEDICAL SYSTEMS AB	H04R 25/00 ; A61F 2/18	Dispositivo de implante para audífonos anclados al hueso, del tipo que comprende un accesorio de fijación (1) en forma de tornillo para anclaje en el tejido óseo, un manguito de tope (2) para penetración en la piel y que está dispuesto para ser conectado al accesorio de fijación (1) por medio de una conexión de rosca (3) y una herramienta (4) para instalar el implante en el tejido óseo, caracterizado porque el accesorio de fijación (1) y el manguito de tope (2) están constituidos en forma de una unidad premontada, unidad que está preparada para ser instalada en una sola etapa por medio de dicha herramienta (4) que está dispuesta para cooperar con una parte de acoplamiento para una herramienta (5) sobre el manguito de tope (2).
KR20080111543	SE - 20060000851 - 19/04/2006	ENTOMED AB	A61B 5/12	Method for hearing-related examination comprising the steps of generating sound signals and/or electrical signals in an examination unit (12). The method includes the steps of removably connecting the examination unit (12) as a modular unit to a base unit (11) and removably connecting a function card (13) to the base unit (11). Further steps are sending control signals from the function card (13) to the examination/module unit (12) for performing a specific examination, and obtaining test result data in the examination unit (12) and collecting said test result data to the function card for storage therein. The device comprises a base unit (11) having a display (15), input means (16; 17; 45) and output means (15) for performing the examination.; The base unit (11) comprises a first interface (14) receiving a function card (13) and the function card (13) comprises a first control unit (33), a data memory (31) and a program memory (32) a, said program memory storing software for performing an examination and said data memory (31) storing data related to the examination. The base unit (11) comprises a second in-terface (28) receiving at least one modular unit (12) having a micro controller (29), examination output and input means, and the data memory (31) of the function card is connected to said micro controller (29) of the modular unit for collecting and storing examination data.
CN101309629	US - 20050280873 - 16/11/2005	ETYMOTIC RES INC	A61B 1/227 ; A61B 5/12	A hearing screening system for testing hearing abilities of a patient includes an otoacoustic emission (OAE) module operable to perform OAE tests, a tympanometry (tymp) module operable to perform tymp tests, and at least one probe in communication with at least one of the OAE and tymp modules. The probe includes a probe tip that is configured to be positioned within an ear canal of a patient.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
EP1961262	WO - 2006NL00634 - 12/12/2006 ; NL - 20051030649 - 12/12/2005	EXSILENT RES B V	A61F 2/18	A hearing aid comprises a microphone on a proximal side of a device housing and a loudspeaker which via a transmission channel is in open communication with a sound- emitting opening of the device. A sound processing device serv es to generate sound received by the microphone to the loudspeaker in amplified form. The device housing is provided on a distal side with an optionally sealed battery chamber for receiving a battery therein. The transmission channel is at least almost wholly separated from the microphone acoustically in order to prevent acoustic feedback. The battery chamber comprises ventilation means for the purpose of increasing the lifespan of the battery.
US2008273732	DE - 200710020340 - 30/04/2007	FICKWEILER WERNER ; FREELS BJORN ; KRAL HOLGER ; SAUER JOSEPH	H04R 25/02 ; B22F 3/02 ; B29C 43/00	In order to connect a hearing device to a carrying hook, a connecting element is used, which has to satisfy high demands with regards to its precision and stability. To ensure this, the connecting element is designed as a powder injection molded part, in particular as a ceramic injection molded part or metal part, which is manufactured in a ceramic injection molding process or a metal injection molding process.
JP2008180652	JP - 20070015421 - 25/01/2007	FUJITSU COMPONENT LTD	G01C 21/00 ; A61F 9/08 ; A61F 11/04 ; A61H 3/06 ; G08G 1/005 ; G08G 1/095 ; G09B 29/10	PROBLEM TO BE SOLVED: To propose direction presenting system capable of performing direction presenting surely from direction indicating information by stimulating user's tactile with simple structure. - SOLUTION: The direction presenting system presented here is equipped with an electro-magnetically-driven actuator AT including a moving section capable of sliding obliquely in addition to back and forth and around and a control of driving section DC-P controlling sliding direction of the moving section from direction indicating information GPS presented externally. According to the present invention, since the control of driving section slid-controls the moving section of the electro-magnetically-driven actuator from direction indicating information presented externally, the moving section can tactually-stimulate user's fingers, hands, and elbows and the like with a fixed length. Thus, since the direction can be presented by tactual-stimulation of user not by visual sense nor by auditory sense, the direction to be presented can be transmitted surely even if users are those who have disability in visual sense or auditory sense.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
JP2008309865	JP - 20070155213 - 12/06/2007	FUJITSU TEN LTD	G10L 15/22 ; G01C 21/00 ; G08G 1/0969 ; G10L 15/00 ; G10L 15/06 ; G10L 15/24	PROBLEM TO BE SOLVED: To prevent that uttering to outside of a vehicle is incorrectly recognized as uttering to an in-vehicle device, by separating the uttering to the in-vehicle device from the uttering to outside of the vehicle. - SOLUTION: In the voice recognition device 10, a voice recognition processing section 13a uses a specified area dictionary 12b and an outside specified area dictionary 12c, and recognizes voice by determining whether or not an uttered vocabulary is included in the dictionaries, and performs command conversion. A command after the command conversion is output to a car navigation device 20 by a command output processing section 13c. Furthermore, the voice recognition processing section 13a determines whether or not a current position of a vehicle 1 is included in the specified area information 12a based on a GPS position information obtained from the car navigation device 20. When it is determined that it is included, only the outside specified area dictionary 12c is used so that voice recognition of the uttered vocabulary which is assumed to be uttered in the specified area may not be performed. - COPYRIGHT: (C)2009,JPO&INPIT
JP2008309966	JP - 20070156804 - 13/06/2007	FUJITSU TEN LTD	G10L 15/08 ; B60R 11/04 ; G10L 11/00 ; G10L 15/00 ; G10L 15/22 ; G10L 15/24 ; G10L 15/28	PROBLEM TO BE SOLVED: To provide a voice input processing device and voice input processing method, which improve recognition accuracy of an utterance object and which performs appropriate input processing even when the utterance object is insufficiently specified. - SOLUTION: A voice input processing section 10 determines possibility that user's voice is input for an in-vehicle device, from a face direction and biological information of a driver, a state of a vehicle, recognition accuracy by a speech recognition engine 20, and length of a speech section. Based on the determination results, a step input processing section 11 gradually changes operation of voice input.
US2008312717	US - 20080197822 - 25/08/2008 ; AU - 2002PS03227 - 28/06/2002 ; US - 20050518811 - 11/07/2005 ; WO - 2003AU00828 - 27/06/2003	GANTZ BRUCE J	A61F 11/04 ; A61N 1/05 ; A61N 1/36	An electrode array (30) which is able to be inserted to a desired depth within the cochlea to provide useful percepts for the recipient which will also preferably not cause damage to the sensitive structures of the cochlea. The electrode array (30) is insertable through an opening in the cochlea and into at least the basal region of the cochlea and comprises an elongate carrier (31) having a proximal end, a distal end, and a plurality of electrodes (32) supported by the carrier at respective spaced locations thereon in a region between the proximal end and the distal end. A stabilising collar (35) extends outwardly from the elongate carrier (31) at or adjacent a proximal end thereof and has an abutment surface adapted to abut a portion of the cochlea surface around the cochleostomy and at least substantially prevent movement of the carrier (31) following completion of insertion of the array (30) into the cochlea.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
CN101245377	CN - 20081006398 - 22/12/2005	GEN HOSPITAL OF PLA	C12Q 1/68 ; C12N 15/11	The invention relates to a detection method, whether a sample from an SLC26A4 gene mutation is the heterozygous mutation of 1586T which is larger than G of a gene exon 14 which is positioned at SLC26A4. The invention also relates to a detection kit for detecting whether the sample from the individual to be tested has the SLC26A4 gene mutation and an application of theSLC26A4 gene mutation in the diagnosis and/or the treatment of the diseases which are related to the large vestibular aqueduct. The gene mutation and the detection method can be beneficial to the clinical development of the SLC26A4 gene mutation screening work of the ---deaf--- patients, thus providing the services for the diagnosis and the treatment of the ---deaf--- patients.
CN101245378	CN - 20081007308 - 22/12/2005	GEN HOSPITAL OF PLA	C12Q 1/68 ; C12N 15/11	The invention relates to a detection method, whether a sample from an individual to be tested has the SLC26A4 gene mutation or not is detected, so as to diagnose the occurrence and the type of the large vestibular aqueduct of the individual to be tested, wherein, the SLC26A4 gene mutation is the heterozygous mutation of 334C which is larger than T of a gene exon 4 which is positioned at SLC26A4. The invention also relates to a detection kit for detecting whether the sample from the individual to be tested has the SLC26A4 gene mutation and an application of the SLC26A4 gene mutation in the diagnosis and/or the treatment of the diseases which are related to the large vestibular aqueduct. The gene mutation and the detection method can be beneficial to the clinical development of the SLC26A4 gene mutation screening work of the ---deaf--- patients, thus providing the services for the diagnosis and the treatment of the ---deaf--- patients.
CN101245379	CN - 20081007309 - 22/12/2005	GEN HOSPITAL OF PLA	C12Q 1/68 ; C12N 15/11	The invention relates to a detection method, whether a sample from an individual to be tested has the SLC26A4 gene mutation or not is detected, so as to diagnose the occurrence and the type of the large vestibular aqueduct of the individual to be tested, wherein, the SLC26A4 gene mutation is the heterozygous mutation of 2054G which is larger than T of a gene exon 18 which is positioned at SLC26A4. The invention also relates to a detection kit for detecting whether the sample from the individual to be tested has the SLC26A4 gene mutation and an application of the SLC26A4 gene mutation in the diagnosis and/or the treatment of the diseases which are related to the large vestibular aqueduct. The gene mutation and the detection method can be beneficial to the clinical development of the SLC26A4 gene mutation screening work of the ---deaf--- patients, thus providing the services for the diagnosis and the treatment of the ---deaf--- patients.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
CN101245380	CN - 20081007310 - 22/12/2005	GEN HOSPITAL OF PLA	C12Q 1/68 ; C12N 15/11	The invention relates to a detection method, whether a sample from an individual to be tested has the SLC26A4 gene mutation or not is detected, so as to diagnose the occurrence and the type of the large vestibular aqueduct of the individual to be tested, wherein, the SLC26A4 gene mutation is the heterozygous mutation of 1540C which is larger than T of a gene exon 13 which is positioned at SLC26A4. The invention also relates to a detection kit for detecting whether the sample from the individual to be tested has the SLC26A4 gene mutation and an application of the SLC26A4 gene mutation in the diagnosis and/or the treatment of the diseases which are related to the large vestibular aqueduct. The gene mutation and the detection method can be beneficial to the clinical development of the SLC26A4 gene mutation screening work of the ---deaf--- patients, thus providing the services for the diagnosis and the treatment of the ---deaf--- patients.
CN101245381	CN - 20081007311 - 22/12/2005	GEN HOSPITAL OF PLA	C12Q 1/68 ; C12N 15/11	The invention relates to a detection method, whether a sample from an individual to be tested has the SLC26A4 gene mutation or not is detected, so as to diagnose the occurrence and the type of the large vestibular aqueduct of the individual to be tested, wherein, the SLC26A4 gene mutation is the heterozygous mutation of 1175A which is larger than G of a gene exon 10 which is positioned at SLC26A4. The invention also relates to a detection kit for detecting whether the sample from the individual to be tested has the SLC26A4 gene mutation and an application of the SLC26A4 gene mutation in the diagnosis and/or the treatment of the diseases which are related to the large vestibular aqueduct. The gene mutation and the detection method can be beneficial to the clinical development of the SLC26A4 gene mutation screening work of the ---deaf--- patients, thus providing the services for the diagnosis and the treatment of the ---deaf--- patients.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
CN101245382	CN - 20081007312 - 22/12/2005	GEN HOSPITAL OF PLA	C12Q 1/68 ; C12N 15/11	The invention relates to a detection method, whether a sample from an individual to be tested has the SLC26A4 gene mutation or not is detected, so as to diagnose the occurrence and the type of the large vestibular aqueduct of the individual to be tested, wherein, the SLC26A4 gene mutation is the heterozygous mutation of 611G which is larger than T of a gene exon 6 which is positioned at SLC26A4. The invention also relates to a detection kit for detecting whether the sample from the individual to be tested has the SLC26A4 gene mutation and an application of the SLC26A4 gene mutation in the diagnosis and/or the treatment of the diseases which are related to the large vestibular aqueduct. The gene mutation and the detection method can be beneficial to the clinical development of the SLC26A4 gene mutation screening work of the ---deaf--- patients, thus providing the services for the diagnosis and the treatment of the ---deaf--- patients.
US7400716	US - 20040888672 - 09/07/2004	GIBSON SR AARON	H04M 1/60 ; H04M 9/00	A multifunctional intercom system having message recording/retrieval functions, a remote control unit, and music playing capabilities, wherein the various buttons are labeled in Braille for use by ---hearing--- ---impaired--- individuals. The intercom system comprises a main control panel, a front door intercom/message unit, a plurality of room intercom units, and a remote control unit, each capable of transmitting and receiving sound from one another. The main control panel has a CD player and a clock radio, and is capable of selectively broadcasting music to the front door intercom/message unit and to the plurality of room intercom units. Messages left at the front door intercom/message unit may be retrieved at the main control panel, or by calling the intercom system from an outside phone line. In use, the user programs a private security code into the intercom system. Unauthorized individuals without knowledge of the private security code are unable to access the messages left upon the message recorder.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
US2008253598	US - 20050576431 - 30/09/2005 ; DK - 20040001501 - 01/10/2004 ; US - 20040616312P - 05/10/2004 ; WO - 2005DK00627 - 30/09/2005	GN RESOUND AS	H04R 25/02	The present invention relates to an adaptor for a BTE hearing aid with a housing to be worn behind the ear, an earpiece for insertion in the earcanal, and a signal transmission member for transmission of a signal from the housing at a first end of the member to the earpiece at a second end of the member, the signal transmission member having a connector at the first end, wherein the housing and the connector of the signal transmission member are not adapted for mutual mechanical interconnection, wherein the adaptor has a first end that is geometrically adapted for mechanical connection with the connector of the signal transmission member and a second end that is geometrically adapted for mechanical connection with the housing, so that the signal transmission member and the housing can be mechanically interconnected through the adaptor whereby the variety of signal transmission member units to be kept in stock by a hearing aid dispenser is substantially minimized.
CN101288614	CN - 20081067316 - 21/05/2008	GRADUATE SCHOOL AT SHENZHEN TS	A61F 9/04 ; A61F 2/18 ; A61F 11/00 ; G10L 19/12 ; G10L 19/14 ; G10L 21/00	The invention relates to an electronic cochlear telephone adaptation device based on spectrum expansion technology, comprising a digital signal processor, an audio input and output interface, an external memory and a power management module, the external memory stores a spectrum expansion program based on the voice signal processing; a narrow-band voice signal from a telephone is amplified by the audio input and output interface and input into the digital signal processor after the AD conversion, the digital signal processor runs the spectrum expansion program in the external memory to convert the narrow-band voice signal from the audio input and output interface to a broad-band voice signal covering the normal voice energy range, and then the broad-band voice signal is output to the external part of an electronic cochlea by the audio input and output interface. The device can provide richer high-frequency voice signal for a person wearing the electronic cochlea, improve the voice recognition capability during the voice communication and more effectively restore the hearing status of the ---deaf--- patients in China by expanding the narrow-band voice in the telephone communication to the broad-band voice with richer high-frequency information.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
CN101313849	CN - 20071074714 - 01/06/2007	GRADUATE SCHOOL AT SHENZHEN TS	A61B 5/12	An ear acoustic transmission audition detector comprises a miniature probe for playing stimulation sound and receiving an ear acoustic transmission signal, a front unit for filtering and amplifying the received ear acoustic signal, and a computer system for processing the signal processed by the front unit. The computer system comprises a parameter power spectrum model for inducing the ear acoustic transmission signal in a transient sate, a model parameter estimation module, a parameter power spectrum calculation module and a result display module. The computer system also comprises a cluster analysis module and an analysis mode selection module. The ear acoustic transmission audition detector takes the power spectrum capable of inducing the ear acoustic transmission signal in the transient state as a standard for evaluating whether the audition of a testee is normal, thereby ensuring a more objective detection. A spectrogram curve mode is adopted to display the detection result, thereby enabling a user to see visually whether the audition of the testee is normal and the specific frequency range where an audition problem arises. Therefore, the detector can be used very conveniently. The ear acoustic transmission audition detector can also determine the position of a damaged tragus in a cochlea, and discriminate whether cochlea audition or after-cochlea olive compound nucleus audition is normal or not.
US2008159569	DE - 200510011358 - 04/03/2005 ; WO - 2006DE00410 - 03/03/2006	HANSEN JENS	H04R 25/00	The invention relates to a method, to a device and to uses thereof for the sensitive detection of audio events in order to obtain sensations and feelings of the living skin. The audio event is broken down in to several spectral ranges, and from the signals which represent said range, control voltages are determined for a defined selection of predetermined transmitters which act upon and/or in the living skin. The selection and allocation of the control voltages is dependant on a signal analysis which uses signals which represent the spectral range. The invention relates both to the rendering of ---deaf--- people sensitive to music and to the transmission of signals to ---deaf--- people.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
AT416592T	US - 20020238829 - 10/09/2002	HEAR WEAR TECHNOLOGIES LLC	H04R 25/00 ; H04R 25/02	An earpiece auditory device includes a behind-the-ear (BTE) component, which includes processing circuitry. In an embodiment, the device also includes a completely-in-canal (CIC) component, shaped to fit into the ear canal of the user such that it touches the bony portion of the ear canal. In some embodiments, the CIC component includes either a universal fit or a custom fit ear mold. The custom fit ear mold can be fabricated using a rapid prototyping technology, in which the contours of the users'ear canal are scanned, and the scan data is used either directly or indirectly to replicate the ear canal contours of that user into the custom fit ear mold. In some embodiments, the ear mold is detachably interconnected with a speaker module, preferably using either an intermediate sleeve or a detachable locking pin assembly.; In another embodiment, the speaker module is permanently encapsulated within the ear mold.
EP2009785	EP - 19990918510 - 14/04/1999 ; US - 19980059307 - 14/04/1998 ; US - 19980059303 - 14/04/1998 ; US - 19980059304 - 14/04/1998 ; US - 19980109506P - 23/11/1998	HEARING ENHANCEMENT COMPANY LL	H03G 3/00 ; H04R 3/00 ; H03G 3/20 ; H03G 7/00 ; H03G 11/00 ; H04B 1/00 ; H04R 25/00 ; H04R 27/02 ; H04S 1/00	A method for processing audio signals optimizes the listening experience for ---hearing--- ---impaired--- listeners, as well as non----hearing--- ---impaired--- listeners, without forcing ---hearing--- ---impaired--- individuals to feel stigmatized by requiring them to employ special ---hearing-------impaired--- equipment. A user actuated controller controls a mixture of a preferred audio signal and a remaining audio signal across a range sufficiently wide enough to encompass all individuals. The preferred audio is recorded and maintained separate from all remaining audio and delivered to the listener in a manner that maintains the separateness of the preferred audio and the remaining audio. The user actuated controller includes the capability of automatically maintaining the listener established ratio in the face of changes in the audio signal. The user actuated controller enables the user to specify a range about the ratio in which the audio may vary, which permits the listener to expand the audio across a continuous range to whatever dynamic range his hearing can accommodate. The controller automatically adjusts to changes in incoming audio. The controller can react to relatively slowly moving changes or prevent short bursts of sound in the remaining audio from modifying the signal levels.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
DE102007062151	DE - 200710062151 - 21/12/2007	HEINZ KURZ GMBH MEDIZINTECHNIK	A61F 2/18	Eine Mittelohr-Totalprothese (10) mit einem Prothesenkörper (13), einem ersten Koppelelement (11) zur Verbindung der Prothese mit dem Trommelfell oder Ankoppeln am Hammergriff und einem zweiten Koppellatte, welches ein starr mit dem Prothesenkörper verbundenes Aufnahmeteil (14) sowie ein Einschiebeteil (15) umfasst, das ein koaxial einschiebbares Steckelement (16) sowie einen starr damit verbundenlatte anliegt, ist dadurch gekennzeichnet, dass das Aufnahmeteil einen länglichen Hohlraum (17) als Aufnahmeöffnung mit zylindrischer Bohrung aufweist, der sich axial erstreckt und das Steckelement vollumfänglich umgibt, dessen lichter Durchmesser grösser ist als die maximale Querausdehnung des Steckelements, der vom Einschiebeteil weg einseitig geschlossen ist und der als Endanschlag für das Steckelement wirkt,; und dass das zweite Koppelelement sich axial maximal ein Drittel der axialen Länge des Prothesenkörpers erstreckt. Damit kann eine gewünschte definierte Länge der Prothese, die auch postoperativ fixiert bleibt, leicht hergestellt werden und intraoperativ auf die jeweils vorgefundene individuelle Situation des Steigbügels ad hoc reagiert werden.
ES2309885T	DE - 200510048618 - 11/10/2005	HEINZ KURZ GMBH MEDIZINTECHNIK	A61F 2/18	Prótesis (30) de huesecillo del oído que sustituye o puentea a al menos un eslabón o a partes de un eslabón de la cadena de huesecillos del oído, en donde la prótesis (30) de huesecillo del oído presenta en uno de sus extremos un primer elemento de fijación (31) configurado como una placa de cabeza para establecer una unión mecánica con el tímpano y en su otro extremo un segundo elemento de fijación (32) para establecer una unión mecánica con un eslabón o con partes de un eslabón de la cadena de huesecillos del oído o con el oído interno, y presenta también entre los dos elementos de fijación (31, 32) una articulación giratoria que comprende una parte de alojamiento (33) fabricada de un plástico elástico, la cual está rígidamente unida con el primer elemento de fijación (31), en el que está alojado articuladamente un elemento giratorio (34) que está sólidamente unido con el extremo -dirigido hacia el primer elemento de fijación (31)- de un vástago alargado (36) que une los dos elementos de fijación (31, 32) uno con otro, y la cual presenta una cavidad que está conformada de tal manera que, en estado montado, abraza y envuelve a al menos la mitad de la superficie del elemento giratorio (34).

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
ES2303005T	DE - 20032010609U - 10/07/2003	HEINZ KURZ GMBH MEDIZINTECHNIK	A61F 2/18	Prótesis de huesecillo del oído que se puede fijar por un extremo al mango del martillo de la cadena de huesecillos del oído humano y por el otro extremo al estribo de dicha cadena de huesecillos del oído humano o bien se puede introducir directamente en el oído interno, y que comprende al menos una articulación integrada (30), caracterizada porque están previstas varias articulaciones de rótula (30a, 30b, 30c) dispuestas una tras otra.
ES2309820T	DE - 200510010705 - 09/03/2005	HEINZ KURZ GMBH MEDIZINTECHNIK	A61F 2/18	Prótesis de huesecillos auditivos (10; 20), en la que por lo menos un miembro de la cadena humana de huesecillos auditivos es reemplazado o franqueado, teniendo la prótesis de huesecillos auditivos (10; 20), junto a sus dos extremos un primer elemento de fijación (11) y un segundo elemento de fijación (12; 22) para la unión mecánica con un miembro de la cadena de huesecillos auditivos, con el tímpano o con el oído interno así como entre los dos elementos de fijación (11, 12; 22), una articulación esférica, que comprende dos alas (13, 13") las cuales están unidas firmemente con el primer elemento de fijación (11), discurren paralelamente o formando un ángulo entre sí y encierran entre sí un espacio en forma de hendidura, dentro del cual una esfera (14) está apoyada articuladamente en dos rebajos (15) de las alas (13, 13"), siendo la esfera (14) una parte componente de un vástago alargado (16), que une entre sí a los dos elementos de fijación (11, 12; 22).
CN201149710Y	CN - 20072146007U - 27/03/2007	HENGHUI ELECTRIC APPLIANCE ENG	G08B 7/06	The utility model relates to a door ring which comprises a power supply (2), a vocalizing component (1), a button (3), a shell (10) and at least a light emitting component (4) which is in parallel connection with the vocalizing component (1); the light emitting component (4) flickers while the vocalizing component (1) vocalizes. The door ring in the utility model has the advantages that because the light emitting component flickers while the traditional vocalizing component vocalizes and the light is used as the prompt; a plurality of light emitting components can be led and arranged on the places far from the door ring shell, the door ring is applicable to the noisy environment, large indoor area environment or the environment with more rooms, and the persons who are ---deaf--- or have bad listening.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
US2008298620	DE - 200710025976 - 04/06/2007	HO WAI KIT DAVID ; KOO WEE HAW ; TAN BENG HAI	H04R 25/02	A wearing hook is provided for the behind-the-ear hearing device to improve acoustic stability. The wearing hook being composed of a metal part and a plastic part. The wearing hook is split substantially at a right angle to the sound channel, which runs along the inside of a wearing hook, into a first section and a second section. The first section, via which the wearing hook is mountable on the behind-the-ear hearing device, is substantially composed of a plastic. On the other hand the second section is substantially composed of a metal. The additional mass of the metal reduces the vibrations at the point of the wearing hook so that acoustic stability is improved.
US2008303657	US - 20070759800 - 07/06/2007	HONEYWELL INT INC	G08B 21/00	The instant invention includes a central security and alarm system that operates to protect a home or business and includes a personal safety device to communicate with a hearing-challenged end-user at the protected home or business. The system includes at least one alarm event detection device, and a central panel in communication with the personal safety device and the at least one alarm event detection device, the central panel comprising a processor for carrying out a method of communicating to the hearing-challenged end-user at the detection of alarm events via the personal safety device. The method includes detecting an alarm event at the home or business and noting a designated, hearing-challenged end-user that the alarm event has occurred by causing a life safety device in the possession of the hearing challenged end-user to communicate the detected event by a mechanical communication signal.
US2008234817	DE - 200710013708 - 22/03/2007	HUETTENBRINK KARL-BERND ; STEINHARDT UWE	A61F 2/18 ; A61B 17/08	An ossicle prosthesis includes, at one end, a first fastening element designed as a top plate for mechanical connection with the tympanic membrane, and, at the other end, a second fastening element for mechanical connection with a component or parts of a component of the ossicular chain or with the inner ear, and a connecting element that connects the two fastening elements with each other in a sound-conducting manner; the top plate includes a radially outward annular region, a radially inward attachment region for mechanically attaching the top plate to the connecting element, and several segment elements for radially connecting the annular region with the attachment region, characterized by the fact that the segment elements are geometrically designed such that they locally emulate any localized medial motions made by the tympanic membrane, but they do not transmit the motion to distant regions of the top plate.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
US2008195177	AU - 20030905729 - 20/10/2003	IBRAHIM IBRAHIM	A61F 11/04 ; A61F 11/00	A transmission circuit for an RF inductive link, particularly for an implanted device such as a cochlear implant. In a preferred form, the transmission circuit 1 includes a transmitter coil 24 and a damping device, including an auxiliary coil 4 and switch 6 . The switch is operated to close the coil circuit when data zeros are transmitted. This has the advantage of improving modulation depth without placing stress on the RF driver output switches.
CN101256776	CN - 20071084977 - 26/02/2007	IND TECH RES INST	G10L 21/00 ; G10L 19/02	A voice signal processing method suitable for improving voice identifying ability of a ---hearing--- ---impaired--- person is disclosed, the voice signal processing method comprises the following steps of, first of all, receiving a voice signal, wherein the voice signal is divided into a plurality of sound frames; performing a frequency spectrum analysis to the individual sound frame signal, estimating actual frequency width of each sound frame signal, and carrying out a frequency transfer to the actual frequency width of each sound frame signal in order to accord with the audition frequency width of the ---hearing--- ---impaired--- person. Furthermore, the energy is compensated to each sound frame after the frequency transfer for the purpose of compensating the reduced energy after the frequency transfer.
US2008177539	TW - 20070102443 - 23/01/2007	IND TECH RES INST	G10L 17/00	A method of processing voice signals suitable for enhancing the speech discrimination ability of a ---hearing--- ---impaired--- person is disclosed. First, a voice signal is received, and the received voice signal is divided into a plurality of voice frames. A frequency spectrum analysis is conducted on one of the voice frames to estimate the effective bandwidth of the voice frame. Next, a frequency transposition process is performed on the voice signal so as to suit the auditory sensation bandwidth of a ---hearing--- ---impaired--- person. In addition, an energy compensation process is performed on the voice frame after performing the frequency transposition process so as to compensate the reduced energy brought by the frequency transposition process.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
ES2302911T	DK - 20020000038 - 10/01/2002	INTERACOUSTICS AS	F04B 17/00 ; A61B 5/12 ; F04B 19/00 ; F04B 35/00	Un dispositivo de medición para la medición acústica en un canal auditivo, comprendiendo el dispositivo una sonda para su inserción en un canal auditivo de manera estanca y que tiene una abertura para la transferencia de aire dentro y fuera del canal auditivo, comprendiendo así mismo el dispositivo una bomba para proporcionar una diferencia de presión en relación con la presión atmosférica ambiente, comprendiendo la bomba una carcasa (7, 8) con unas aberturas de entrada (4) y/o de salida (5), en el que dentro de la carcasa (78) está dispuesto un elemento de pistón que tiene propiedades piezoeléctricas, en el que una abertura de la bomba está operativamente conectada a la abertura de la sonda, en el que en conexión con la abertura de entrada y la abertura de salida están dispuestos unos elementos de válvula (2, 3) para controlar la entrada y la salida y en el que los elementos de válvula tienen propiedades piezoeléctricas, caracterizado porque se dispone un control electrónico que está adaptado para controlar la apertura y cierre de los elementos de válvula en relación con el movimiento del pistón de una forma que posibilita la creación de una presión tanto por encima como por debajo de la presión atmosférica ambiente.
KR20080075273	KR - 20070014204 - 12/02/2007	JEON CHANG HYEON ; KIM YONG SIK ; KIM SEUNG TAEK ; JEONG IN SEONG	G10L 15/06 ; G10L 15/22 ; G10L 15/24 ; G10L 21/02	Menu-driven voice (speech) recognition and operation system based on bar-code like multiple level patterns of pre-defined speech data
US2008167575	US - 20050570455 - 13/06/2005 ; US - 20040579486P - 14/06/2004 ; WO - 2005US20827 - 13/06/2005	JOHNSON & JOHNSON CONSUMER	A61B 5/12 ; G06F 19/00	An audiometer system (100) includes a user (105), a sound room (110), a Speaker (115), a pair of headphones (120), a pair of leads (125) and (130), a button (135), and an audiometer (140). User (105) is an individual on whom a hearing test is to be administered. User (105) is an individual on whom a hearing test is to be administrated. User (105) wears headphones (120) in sound room (100). An audiologist conducts a Hearing test by operating audiometer (150). Audiometer (140) produces a hearing test by operating audiometer (140). Audiometer (140) produces the required tones at the desires frequency and amplitudes, according to adjustments made to frequency adjust (150) and amplitude adjusts (150). Frequency adjust (145) and amplitude adjust (150) can be rotary or push button adjustments.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
US2008187145	US - 20050570459 - 14/06/2005 ; US - 20040579369P - 14/06/2004 ; US - 20040579368P - 14/06/2004 ; US - 20040579420P - 14/06/2004 ; US - 20040579438P - 14/06/2004 ; US - 20040579366P - 14/06/2004 ; US - 20040579479P - 14/06/2004 ; US - 20040579220P - 14/06/2004 ;	JOHNSON & JOHNSON CONSUMER	H04R 29/00 ; A61B 5/00 ; A61B 5/12	Method and system (400) for becoming aware of some hearing loss and the need for a professional hearing test. Simple and professional hearing testing provide an understanding of the improvement in the quality of life that can be achieved through use of a hearing aid. Ordering and fitting of the hearing aid, and training on use of a hearing aid, are performed to further demonstrate and provide for improved quality of life. The system (400) includes a user (410), a hearing test unit (415), a test administrator computer (420), a pair of headphones (422), a keyboard (423), a monitor (426), a series of hearing test programs (446), a central hearing health system (440), a database, a device (433), and a set of individual results.
US2008269636	US - 20050570463 - 10/06/2005 ; US - 20040579369P - 14/06/2004 ; US - 20040579947P - 15/06/2004 ; WO - 2005US20756 - 10/06/2005	JOHNSON & JOHNSON CONSUMER	A61B 5/00 ; A61B 5/12 ; H04R 29/00	System and method for conducting a hearing test that is accessible to a mass market of individuals with potential hearing loss. The hearing test is stored on a centrally located computer (140) that is accessible via communications device (121). The system provides step-by-step guidance on the next steps to be taken if hearing loss is found, and provides a means to store and organize the user test data to create a means for reuse of the data.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
JP2008241772	JP - 20070078103 - 26/03/2007	KONAMI DIGITAL ENTERTAINMENT	G10L 15/02 ; A63F 13/00 ; G06T 13/00 ; G10L 13/00 ; G10L 15/00 ; G10L 15/06	PROBLEM TO BE SOLVED: To provide a voice image processing device etc. by which a processing for changing a mouth shape to be displayed on a screen by being synchronized with user's uttered voice is performed with a simple calculation. - SOLUTION: The voice image processing device 201 includes: a memory section 202 for storing a collation triangle string which approximates a waveform of a syllable, and a syllable image of the mouth shape which utters the syllable by relating them; an input section 203 for receiving input of a voice signal; an approximation section 204 for approximating a waveform of the received voice signal in the approximation triangle string; a determination section 205 for determining whether or not, the approximation triangle string matches the collation triangle string; an output section 206 for outputting the received voice signal; and a display section 207 for displaying the syllable image corresponding to the collation triangle string, when it matches the approximation triangle corresponding to a period of the voice signal which is currently output. - COPYRIGHT: (C)2009,JPO&INPIT
CN101300898	EP - 20050110239 - 01/11/2005	KONINKL PHILIPS ELECTRONICS NV	H04R 25/00 ; A61B 5/12	Method to adjust a hearing aid device, the method comprising: -generating one or more acoustic signals (S2) to induce otoacoustic emissions (OAE) in an inner ear (UIE) of a user of the device (1; 101; 201); -measuring the otoacoustic emissions (OAE); and -adjusting the hearing air device (1; 101; 201) based on a result from the measurement of the otoacoustic emissions (OAE), wherein the inducing and/or measuring of the otoacoustic emissions is at least partly carried out by the hearing aid device (1; 101; 201).
EP1938093	WO - 2006IB53252 - 13/09/2006 ; EP - 20050108781 - 22/09/2005 ; EP - 20060796015 - 13/09/2006	KONINKL PHILIPS ELECTRONICS NV	A61B 5/12 ; G07C 9/00	The present invention relates to a method and apparatus for characterizing acoustical properties of an outer ear 130 , the method comprising the steps of: transmitting a first acoustic signal 125 towards the outer ear 130 , receiving a second acoustic signal 150 from the outer ear 130 , and characterizing acoustical properties 165 of the outer ear on the basis of the second acoustic signal 150 . The method is characterized in that the first acoustic signal 125 comprises at least one of the following elements: music, and speech. The present invention further relates to a method and apparatus for enrolling, authenticating and identifying a person on the basis of acoustical properties of an outer ear 130.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
EP1946611	WO - 2006IB53938 - 26/10/2006 ; EP - 20050110239 - 01/11/2005 ; EP - 20060809707 - 26/10/2006	KONINKL PHILIPS ELECTRONICS NV	H04R 25/00 ; A61B 5/12	Method to adjust a hearing aid device, the method comprising: -generating one or more acoustic signals (S 2) to induce otoacoustic emissions (OAE) in an inner ear (UIE) of a user of the device (1; 101; 201); -measuring the otoacoustic emissions (OAE); and -adjusting the hearing air device (1; 101; 201) based on a result from the measurement of the otoacoustic emissions (OAE), wherein the inducing and/or measuring of the otoacoustic emissions is at least partly carried out by the hearing aid device
US2008298619	DE - 200710025936 - 04/06/2007	KRAL HOLGER ; SATTLER MICHAEL	H04R 25/02	A hearing device which is simple to assemble and to which a wearing hook can be fastened in a stable fashion is provided. The hearing device includes a receiver, which has a sound outlet, a wearing hook, which has a sound channel, a connecting piece for connecting the sound outlet of the receiver to the sound channel of the wearing hook and includes a housing frame, in which the receiver and to which the wearing hook are fastened respectively. The connecting piece may be formed largely of metal or ceramic and may be directly fastened to the housing frame.
JP2008209793	JP - 20070048032 - 27/02/2007	KYOCERA CORP	G09B 21/00 ; H04M 1/23	PROBLEM TO BE SOLVED: To provide a braille display apparatus enabling even a visually and ---hearing--- ---impaired--- person to easily acquire information only by the tactile sense of the fingertips on a small space that can be installed even on a mobile terminal device. - SOLUTION: The braille display apparatus (mobile terminal device) 100 comprises: a movable pin array section 116 composed of a plurality of movable pins 142 arrayed with tips aligned in an approximate plane in a grid shape; a plurality of movable pin press-out sections 118 pressing out each of the plurality of movable pins 142; a braille forming section 170 forming a braille pattern; and a movable pin control section 172 pressing out the movable pins corresponding to the braille pattern formed in the movable pin press-out section 118.
JP2008191485	JP - 20070026921 - 06/02/2007	KYOCERA MITA CORP	G03G 21/00 ; B41J 29/42 ; G06F 3/12 ; H04N 1/00	PROBLEM TO BE SOLVED: To have a ---hearing--- ---impaired--- person using an image forming apparatus enjoy the same extent of operability and usefulness as that obtained when a notifying sound is made. - SOLUTION: The image forming apparatus 1 includes an image forming part 11, an operation panel 71, a speaker 72, and a light emitting part 73. The operation panel 71 receives key operations. The speaker 71 lets out different notifying sounds according to a plurality of states including at least a state created by the accepted key operation in the operation panel 71. The light emitting part 73 emits light at the same timing that the notifying noise is made by the speaker 72.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
US2008292067	KR - 20050126933 - 21/12/2005 ; WO - 2006KR05293 - 07/12/2006	LEE SEUNG HWAN	H04M 11/00	The present invention relates to a terminal for hard of----hearing--- and speech----disabled--- people and a character transmitting and receiving method using the same, in a mobile communication system that provides voice communication services using a mobile terminal, such as CDMA, and a system that provides voice communication services through a packet communication network, such as VoIP. A character communication function is implemented in a mobile terminal or a VoIP phone that is widely spread. The character communication function matches to a function that transfers character information for hard of-bearing and speech-disabled people along a path that provides voice services, and thus a user can freely communicate simply using the mobile terminal or VoIP phone. It is advantageous in that character communications can be performed without modifying the systems or hardware of the terminal, and communication mobility is provided to hard of----hearing--- and speech----disabled--- people.
US2008215148	US - 20060886134 - 22/05/2006 ; US - 20050664570P - 22/03/2005 ; WO - 2006US10673 - 22/03/2006	LESINSKI S GEORGE ; NEUKERMANS ARMAND P ; GRANT RICHARD L ; IRVING KEVYN	A61F 2/18	A set of fenestration burrs, for fenestrating otic capsule bone (34), includes an initial burr (150) and a sequence of fenestration polishing burrs (180). A polishing burr (152, 1521), of each of the burrs (150, 180), carries at least one spiraling flute (166, 166 '). Fenestrations (36) piercing the bone (34) formed using the burrs (150, 180) exhibit uniform diameters while excluding bone dust from the inner ear. An implantable casing (72) includes a hollow collar (76) from which projects a hollow sleeve (74) receivable into the fenestration (36). The casing (72) is secured there by at least one prong (92, 102) jutting from the sleeve (74). A therapeutic appliance (134) is insertable into the casing (72). A flange (116) extending from one end of the sleeve (74) carries at least one L-shaped slot (122) open at one end and extending circumferentially around the flange (116).
KR20080105813	KR - 20070053868 - 01/06/2007	LG ELECTRONICS INC	H04R 3/00 ; H04R 25/02	The module and apparatus for transmitting and receiving sound are disclosed in which a first channel is connected to an insertion of a microphone, a second channel is connected to a speaker insertion, such that sounds from the first and second channel are independently transmitted to prevent a first sound transmitted to the microphone and a second sound outputted from the speaker from being mixed, whereby noise generation can be obviated to improve characteristics of the module and the apparatus.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
EP1951175	WO - 2007KR03071 - 25/06/2007 ; KR - 20060068626 - 21/07/2006	MATERIAL SOLUTIONS TECHNOLOGY		There is provided a cochlear implant for improving the hearing ability of a patient suffered from hearing impairment comprising an internal receiving unit implanted into the body, which comprises a receiving part for receiving external signal, an active electrode and a reference electrode, characterized in that the active electrode is constructed with a single electrode wire having different thickness in at least two different regions. The active electrode of the internal receiving unit is inserted into a space formed at between the mastoid bone and the ear canal skin and end of the active electrode is inserted into the scala tympani of the cochlea and directly stimulates spiral ganglion. The cochlear implant provides easier implantation into the body and improved hearing ability at a lower cost.
JP2008268450	JP - 20070109809 - 18/04/2007	MATSUSHITA ELECTRIC WORKS LTD	G10L 15/22 ; G10L 15/00 ; G10L 15/28	PROBLEM TO BE SOLVED: To provide an operating device with a speech recognition function, capable of reducing burden such that a user memorizes a recognizable vocabulary. - SOLUTION: The operating device 1 comprises: a manual operation section 7 for operating an illumination device 20; a microphone 5 to which speech uttered by a user is input; a sound model storage section 8 in which a sound model of a plurality of operation vocabularies for operating the illumination device 20 is stored; a speech recognition section 9 for performing speech recognition by comparing speech inputted to the microphone 5 with the sound model stored in the sound model storage section 8; and a control section 30 for controlling the illumination device 20 based on either of operation input by the manual operation section 7 or a recognition result by the speech recognition section 9. When the operation which is operable by the speech recognition is performed by the manual operation section 7, the control section 30 makes the speech generation section 12 perform speech synthesis of speech guidance for informing that the operation is performed by the speech recognition, and outputs it from a speaker 6. - COPYRIGHT: (C)2009,JPO&INPIT
AR062763	US - 20060825297P - 12/09/2006	MED EL ELEKTROMED GERAETE GMBH	A61F 2/18 ; A61F 9/00	Una estructura de fijacion implantable incluye por lo menos un elemento de retencion implantable. El elemento de soporte está conectado a un elemento de implante coclear implantable y mantiene al elemento de implante coclear en una posicion deseada con relacion al oído medio de un paciente.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
WO2008100845	US - 20070889322P - 12/02/2007	MED EL ELEKTROMED GERAETE GMBH ; KERBER MARTIN J	H04R 25/00 ; A61B 5/12 ; A61N 1/36	Le système et le procédé décrits sont destinés à un système de détection implantable. Un détecteur implantable génère un signal de détection qui représente un emplacement de détection interne d'un utilisateur. Une porte de détection, couplée au détecteur et sensible au signal de détection, possède une valeur seuil de grille de détection de manière à ce que le signal de détection soit couplé depuis la grille de détection à un processeur de signal implanté lorsque le signal de détection a une magnitude plus importante que la valeur de seuil de la grille de détection et le signal de détection est bloqué lorsque le signal de détection a une magnitude inférieure à la valeur de seuil de la grille de détection.
BRMU8701037U U	BR - 2007MU8701037U - 27/04/2007	MIRANDA JAIR VICENTE ; MIRANDA CARLOS EDUARDO	A61F 11/04	APARELHO AUXILIAR PARA DEFICIENTES AUDITIVOS. Projetado para o fornecimento a deficientes auditivos a um custo reduzido, formado por um gabinete (1) com microfone (2), com entrada (3) para receber a ligação de um par de fones (F) de ouvido. Assim, o deficiente, desde que tenha ainda mínima condição de captação de som, aloja o gabinete (1) no bolso da camisa por exemplo e introduz os fones (E) em seu ouvido, podendo, por um botão (4), regular a intensidade de amplificação conforme o local onde se encontra.
CN101291336	US - 20020085990 - 27/02/2002	MOTOROLA INC	G06F 9/46 ; H04L 29/08 ; G06F 17/30 ; G10L 13/00 ; G10L 15/24 ; H04M 3/493	A multimodal network element 14 facilitates concurrent multimodal communication sessions through differing user agent programs 30, 34 on one or more devices 12, 16. For example, a user agent program communicating in a voice mode, such as a voice browser 34 in a voice gateway 16 that includes a speech engine and call/session termination, is synchronized with another user agent program operating in a different modality, such as a graphical browser 30 on a mobile device 12. The plurality of user agent programs 30, 34 are operatively coupled with a content server 18 during a session to enable concurrent multimodal interaction.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
JP2008233438	JP - 20070071728 - 20/03/2007	NAT INST OF ADV IND & TECHNOL	G10L 15/24 ; G10L 15/10 ; G10L 15/28	PROBLEM TO BE SOLVED: To provide a speech recognition device, using a myoelectric potential signal which has improved discriminating capability by using a support vector machine. - SOLUTION: The speech recognition device includes: a signal measuring section 11 which detects myoelectric potentials at a plurality of places nearby lips; a feature extracting section 12 which extracts feature information from the myoelectric potential signals detected by the signal measuring section; a training data generating section 13 which generates training data by the feature information extracted by the feature extracting section; a support vector machine learning section 14 which constitutes the support vector machine based upon the training data generated by the training data generating section; and a speech discriminating section which discriminates a vowel speech from the feature information through data processing of the support vector machine constituted by the support vector machine learning section. - COPYRIGHT: (C)2009,JPO&INPIT
DE602004010855T	JP - 20030064595 - 11/03/2003 ; JP - 20030064615 - 11/03/2003	NAT INST OF ADVANCED IND SCIEN	A61F 11/04 ; H04R 25/00	An audio information transmitting apparatus for transmitting audio information to a human body, comprises an audio signal generating unit (2) in which an audio signal is generated based on inputted audio, an audio information recognizing unit (10) in which the audio signal is recognized as audio information, a vibration signal generating unit (20) in which a vibration signal is generated based on the audio information, a vibration transmitter (30) for transmitting mechanical vibration based on the vibration signal, wherein the vibration signal generating unit modulates a carrier signal having a predetermined frequency based on a predetermined pulse-like pattern corresponding to the audio information so as to generate the vibration signal.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
NZ551980	AU - 1999PP09275 - 17/03/1999 ; NZ - 20000514889 - 17/03/2000	NEUROMONICS PTY LTD	A61F 11/00 ; A61B 5/12 ; H04R 25/00	A device for providing a stimulus to the auditory system of an individual experiencing tinnitus or hyperacusis is disclosed. The device comprises a storage device for storing an audio signal including peaks and troughs, wherein the audio signal is a two-channel stereo audio signal; a signal filter configured to spectrally modify at least a portion of each channel of the audio signal independently in accordance with a predetermined masking algorithm designed to modify at least one of the peaks and the troughs of at least a portion of each channel of the audio signal at independently selected frequencies, and an output for outputting the spectrally modified audio signal. The predetermined masking algorithm accounts for the basic audiometric configuration of the individual whereby, in use at a comfortable listening level, when the spectrally modified audio signal is heard by the individual during the peaks, the tinnitus is substantially completely obscured and the individual perceives significant masking of the tinnitus, and during troughs, the individual may occasionally perceive the tinnitus.
US2008317271	DE - 200710028232 - 20/06/2007	NIKLES PETER ; RADICK ERIKA ; SCHMIDT BENJAMIN ; SCHMITT CHRISTIAN ; SINGER ERWIN ; WIEDENBRUG CORNELIA	H04R 25/02	The production of sealing units, and especially of face plates for that can be worn in the auditory canal is accordingly proposed, with a face plate having a battery opening for holding a battery, with battery contacts, to which at least one signal processing module is connected, being arranged in or on the battery opening. A mount is removably affixed in or on the battery opening in order to hold the at least one signal processing module in or perpendicularly above/below the battery opening. The mount thus serves not only to retain the signal processing components during transport, but also to affix them into the face plate for example during milling of positioning holes for microphones.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
JP2008197381	JP - 20070032480 - 13/02/2007	NIPPON ELECTRIC CO	G10L 13/00 ; A63H 3/33 ; A63H 11/00 ; G10L 15/00	PROBLEM TO BE SOLVED: To provide a loudspeaker controller etc. capable of automatically controlling sound output by a loudspeaker so that sound may be suitable for both normal person and ---hearing-------impaired--- person. - SOLUTION: The loudspeaker controller of the embodiment is equipped with: a person recognition means 201 for detecting a position of a first person and a position of a second person; an arrangement calculation means 301 for calculating a range of a position of a second loudspeaker, where the first person is not within the range, and the second person is within the range of directivity of the second loudspeaker 102, based on the positions of the first person and the second person; an operation means 401 which changes a position of the second loudspeaker 102 so that it may be within the range; and a sound volume compensation means 501 for adjusting a sound volume of the first loudspeaker 101 and the second loudspeaker 102 so that the sound volume of the first loudspeaker reaching the first person may be within a predetermined range, and the sound volume of the second loudspeaker 102 reaching the second person may be within a predetermined range. - COPYRIGHT: (C)2008,JPO&INPIT
JP2008234154	JP - 20070070759 - 19/03/2007	NIPPON ELECTRIC CO	G06F 3/16 ; G10L 15/24	PROBLEM TO BE SOLVED: To reduce a button (key) operation amount required for lower case letter conversion and addition of a symbol or a long sound, in a character input system using mainly a character input by a character button (key). - SOLUTION: A cellular phone terminal recognizes an input voice together with depression of the character button, and converts the character displayed as an input character candidate into (A) the lower case letter (for example, YA->ya), (B) a sonant (for example, ki->gi), (C) a p-sound (for example, fu->pu) and (D) addition of the long sound (for example, ka->kaa), according to a recognition result therein. - COPYRIGHT: (C)2009,JPO&INPIT

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
JP2008177705	JP - 20070007483 - 16/01/2007	NTT DOCOMO INC	H04R 1/00 ; H04M 1/00 ; H04M 1/03 ; H04R 1/02 ; H04R 1/28	PROBLEM TO BE SOLVED: To provide a sound output device that can provide excellent sound wave propagation when used in the presence of a noise, and when used by a conductive ---hearing-------impaired--- person, and has superior waterproofness. - SOLUTION: The sound output device comprises a housing, an input terminal to which a sound signal is input, a vibration actuator which is connected to the input terminal and transduces the sound signal from the input terminal into vibrations and outputs them, and a vibration transmission unit which is coupled to the vibration actuator so as to receive the vibrations from the vibration actuator, the vibration transmission unit being formed in a projection shape such that a user takes one of a method of hooking it on an earlobe, a method of insertion it into an earhole, a method of pressing it into a hollow of a tragus front-part lower-jawbone joint projection rear part, and a method of pressing it against the tragus to close the earhole and having a recessed portion on the surface of the projection shape to output a sound component generated by the vibrations of the vibration actuator through the recessed portion. - COPYRIGHT: (C)2008,JPO&INPIT
WO2009001233	EP - 20070111048 - 26/06/2007	NXP BV ; KROEKENSTOEL DAVE ; NEUTEBOOM HARRY	H03F 3/217 ; H03F 3/21 ; H03F 3/24 ; H03H 7/46 ; H03H 7/48 ; H04B 1/04 ; H04L 27/20	L'invention concerne un dispositif, par exemple un instrument pour malentendant, comprenant un circuit électronique pour la communication sans fil d'un signal numérique. Le circuit comprend un circuit bouchon RLC (106, 108,206,208) dont l'inductance (106) forme une partie d'antenne du dispositif. Le circuit comprend également de multiples amplificateurs de classe D (202, 204) pour commander l'antenne. Chacun des différents amplificateurs commande l'antenne au moyen de l'un des multiples composants représentatif du signal numérique modulant une porteuse dans un mécanisme de modulation par déplacement de phase.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
JP2008310382	JP - 20070154785 - 12/06/2007	OMRON TATEISI ELECTRONICS CO	G06T 7/20 ; G06F 3/048 ; G10L 15/24	PROBLEM TO BE SOLVED: To accurately recognize words based on the movement of a mouth. - SOLUTION: In a lip reading device, a similarity detection part 181 detects the similarity between the mouth shape of a user in a mouth shape image and a plurality of types of basic mouth shapes. A mouth shape period detection part 191 detects an initial mouth shape period when an initial mouth shape appears and a final mouth shape period when a final mouth shape appears based on the similarity. A basic score calculation part 192 calculates basic scores showing the similarity between the mouth shape of a user in each period and each basic mouth shape. A recognition part 172 calculates recognition scores showing probability that each word/phrase registered in a mouth shape dictionary is spoken by the user by using the basic scores. Therefore, this invention may be applied to a lip reading device which recognizes words based on the movement of the mouth. - COPYRIGHT: (C)2009,JPO&INPIT
WO2008125584	EP - 20070106055 - 12/04/2007	OTICON AS ; VAERNDAL RUNE ; SPRAGGE PETER	H04R 25/02 ; H01H 23/14 ; H01H 23/24 ; H01H 23/28	La présente invention concerne un dispositif de commutation pour aide auditive, au moyen duquel une partie de boîtier d'aide auditive est adaptée pour le placement au-dessus et derrière le lobe et renferme une batterie et un dispositif de traitement et d'amplification de signal actionnable pour fournir un signal audio amplifié à l'utilisateur, perceptible comme un son. Le dispositif de commutation comprend en outre une section de base et un élément de pivot rigide actionnable manuellement qui possède deux parties espacées de réception de pression et un axe de rotation placé entre les deux parties de réception de pression, au moyen duquel un cantilever et échelle d'indexation est prévu entre la section de base et l'élément de pivot rigide actionnable afin de permettre à ce même élément d'adopter 2, 3 ou plusieurs positions stables.,
US2008292125	SE - 20030002489 - 19/09/2003 ; WO - 2004SE01321 - 15/09/2004	P & B RES AB	H04R 25/00	A method and an arrangement for damping the resonance frequency in a vibrator for bone anchored hearing aids in which sound information is mechanically transmitted via the skull bone directly to the inner ear of a person with ---impaired--- ---hearing---. A microphone picks up the sound, a signal processor amplifies and filters the signal from the microphone and a vibrator converts the electrical signal into vibrations. The signal processor of the hearing aid is used for damping the resonance frequency peak of the vibrator. For this purpose the signal processor includes electronic filters that are arranged to reduce the amplification in the signal processing chain of the hearing aid as much as the desired dampening of the resonance frequency peak of the vibrator.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
PT1003865E	US - 19970055863P - 15/08/1997	PASTEUR INSTITUT	C12N 15/12 ; G01N 33/53 ; C12N 15/09 ; C12Q 1/68 ; G01N 33/566	A purified polynucleotide having a chain of nucleotides corresponding to a mutated sequence, which in a wild form encodes a polypeptide implicated in hereditary sensory defect, wherein said mutated purified polynucleotide presents a mutation responsible for prelingual non-syndromic deafness selected from the group consisting of a specific deletion of at least one nucleotide.
EP1998729	WO - 2007FR51031 - 28/03/2007 ; FR - 20060002674 - 28/03/2006	PAVLOPOULOS PANAGIOTIS	A61F 11/04	The present invention relates to a system (1) for helping hearing-impaired people, comprising; a device (30) for capturing sounds emitted by a speaker addressing the person, a head-up display device (10), a processing system (20) for analyzing in real time sound data transmitted by the acquisition device and transmitting to the display device an at least partial phonetic transcription of this sound data, to be displayed in the field of vision of the person, so that he can observe both the movement of the lips and/or the movements of the speaker and the phonetic transcription.
EP1952668	WO - 2005CH00701 - 25/11/2005	PHONAK AG	H04R 25/00 ; A61B 5/12 ; H04R 31/00	So as to exploit the experience widely spread for fitting hearing devices, workflows of fitting processes are stored (9, 9-1). A momentary or future fitting operation is performed in dependency from previously performed fitting processes. To do so the stored workflows of the fitting processes are evaluated (13) and the evaluation result (R) influences presently performed or future fitting processes.
US7450724	WO - 1999CH00379 - 17/08/1999	PHONAK AG	H04R 29/00 ; A61B 5/00 ; A61B 5/12 ; A61N 1/00 ; H04R 25/00	A hearing device fitting device that includes a computing device (3), connected on an input side with a connection (E 3) for data entry and on an output side with a connection (A 3) for a hearing device. The hearing device fitting device further includes an audio storage medium play-back unit having a control input (E 9) connected to a computing device (3) output and having an audio output (A 3) connectable to a loud speaker unit (11) input. The device supports a method a method for fitting the hearing device in situ by applying the hearing device to an individual; subjecting the individual to an audio test signal; having the individual appraise said audio test signal; and automatically selecting, in dependency of said appraising, a subsequent audio test signal.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
US2008300703	US - 20080193219 - 18/08/2008 ; US - 20080131552 - 02/06/2008 ; US - 20000669042 - 25/09/2000	PHONAK AG	H04R 25/02	A hearing device having at least one of an acoustical/electrical converter and an electrical/acoustical converter respectively with an acoustical input or output. The input or output, as the case may be, is linked to a coupling opening at the outer surface of the device via a channel. At least a part of the outer surface of the device is formed by a one-part shell. The shell defines an inner space of the device, with the channel being provided within and along the part of the shell and being formed within the material of the shell.
WO2008110210	WO - 2007EP52419 - 14/03/2007	PHONAK AG ; AQUILINA C PAUL	H04R 25/02	La présente invention concerne un dispositif auditif qui comprend un connecteur (2) ayant au moins un contact électrique (6) ; et une commande utilisateur (8), ladite commande utilisateur (8) comprenant ledit ou lesdits contacts électriques (6). Typiquement, ledit connecteur est un connecteur permettant d'obtenir une connexion de communication avec ledit dispositif auditif. La commande utilisateur peut être un commutateur de bouton poussoir. Dans un mode de réalisation, ledit connecteur comprend au moins deux contacts électriques (6), et ladite commande utilisateur comprend un élément de court-circuit (12) pour court-circuiter lesdits deux contacts électriques, ou plus, lorsqu'ils sont actionnés. Dans un mode de réalisation, ladite commande utilisateur comprend un élément élastique (14), qui est déformé lorsque ladite commande utilisateur est actionnée, pour remettre ladite commande utilisateur dans sa position initiale. Ainsi, un dispositif auditif de petite dimension peut être obtenu. Le procédé d'actionnement d'un dispositif auditif comprend l'étape consistant à utiliser au moins un contact électrique (6) d'un connecteur (2) dudit dispositif auditif en tant que partie d'une commande utilisateur (8) dudit dispositif auditif.
WO2008116500	WO - 2007EP52937 - 27/03/2007	PHONAK AG ; GABATHULER BRUNO ; OCHSENBEIN ANDRE LUCIEN	H04R 1/12 ; H04R 25/00	L'invention concerne un dispositif d'écoute comprenant au moins un microphone (2) agencé à l'intérieur du boîtier (3) du dispositif d'écoute, avec son ouverture d'entrée de son (21)connectée par l'intermédiaire d'un canal (7) à l'extérieur du boîtier (3) et un couvercle (10) perméable au son servant de protection du microphone qui est agencé dans la région de l'ouverture de sortie dudit canal (7). Le canal (7) du dispositif d'écoute est formé par un trou aveugle et le microphone (2) est agencé au côté dudit canal (7) et au moins une ouverture ou canal (9) est prévue, reliant ledit canal (7) à ladite ouverture d'entrée de son (2') dudit microphone (2). Par la fourniture du canal (7) sous forme de trou aveugle, toute poussière entrant de manière possible dans le canal (7) sera collectée à la partie inférieure du couvercle (10) et n'atteindra donc pas directement le microphone (2) ou les ouvertures d'entrée de son du microphone (2) respectivement.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
CN201143259Y	CN - 20072310468U - 11/12/2007	PLASTIC SURGERY HOSPITAL CAMS	A61F 11/00 ; A61F 2/18 ; A61M 29/02	The utility model relates to a retroauricular dilator which is composed of an expander capsule, a conduit and an injection pot. Due to a kidney-shaped design, the expander capsule has a comparatively narrow upper part and a comparatively broad lower part, an outer rim is composed of a plurality of circle arcs which are mutually connected, the radius of the circle arc ranges from 8mm to 70mm, the maximal length from the left end to the right end of the expander is 42.6mm, while the maximal length from the upper end to the lower end thereof is 90mm, thus the entire expander capsule can better fit the physiological structure of the mastoid region behind the auricle of the human body. The dilator of the utility model with the unique design is in line with the normal shape of the retroauricular skin of the human body, can generate the hairless retroauricular expanded skin more fully, thus satisfying the demand of auricle reconstruction, obviously reducing the tension of the skin behind the reconstructed auricle and easing the occurrence degree of scar. In addition, the dilator of the utility model can shorten the treatment time and lower treatment difficulty, thus reducing medical cost; meanwhile, the production cost can also be reduced due to the simple entire design and structure.
US2008298600	US - 20080106893 - 21/04/2008 ; US - 20070925623P - 19/04/2007	POE MICHAEL ; QUICK ANTHONY ; CHARI SRINIVAS ; CAMPBELL DON E K	H04R 29/00	A method for fitting a hearing instrument comprises placing the hearing instrument in situ includes receiving an audiogram of the user, determining a target gain for the hearing instrument as a function of the audiogram, exposing a reference sensor located adjacent the hearing instrument to an external speech signal, measuring an external sound pressure level (SPL) via the reference sensor, exposing a probe sensor coupled to the inside of the ear to the output of the hearing instrument while the hearing instrument is in situ, measuring an internal sound pressure level ("SPL") inside the ear of the user via the probe sensor, determining an offset gain as a function of the external SPL, the target gain and the internal SPL, and automatically adjusting a gain of the hearing instrument according to the offset gain. A system for automatically fitting a ---hearing--- ---impaired--- person with a digital hearing aid in situ includes a digital hearing aid, a reference volume sensor, a probe sensor, a sound mapping module and a parameter control module.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
WO2008148585	IT - 2007RM00130U - 06/06/2007	POLSELLI ROBERTO ; ANGELONI ANDREA	H04R 25/02	La présente invention concerne un insert intra-auriculaire (1) qui peut être reçu dans un canal auditif ; il comporte un corps principal (2) essentiellement en contre-forme par rapport à une portion du canal auditif et qui se détend le long d'un axe d'insert (A-A, B-B) entre une portion d'extrémité intérieure (3) prévue pour être tournée vers l'intérieur du canal auditif et une portion d'extrémité extérieure (4) prévue pour être tournée vers l'extérieur du canal auditif, ce corps (2) comprenant une paroi annulaire (5) autour de l'axe mentionné, pourvue d'une cavité qui s'étend de manière continue entre ces portions d'extrémité (3, 4) afin de créer, en coopérant avec une surface du conduit auditif, un canal de ventilation (T1, C1, T2, C2, T3, C3, T4). Ce canal de ventilation comprend une pluralité de sections courbes espacées axialement (C1, C2, C3) qui entourent au moins cet axe et au moins une section transversale intermédiaire (T2, T3) qui place deux sections courbes consécutives en communication fluide.
CN201114290Y	CN - 20072110274U - 05/06/2007	QUZHOU HOLLY ELECTRONICS CO LT	H04M 1/60	The utility model relates to a telephone loudspeaker suitable for the ---hearing--- ---impaired--- people, which comprises a telephone interface, a telephone handle interface, a speech coupled circuit and a power circuit which comprises batteries, a DC switching power supply and a relay. In addition, a wire connected between the speech coupled circuit and the telephone interface is provided with two signal switches and a switch relay; and the telephone handle interface is in parallel connection with an earphone socket. By controlling the two signal switches, a normal telephone can be used by both the normal hearing people and ---hearing--- ---impaired--- people, the arrangement of the batteries and the DC switching power supply contributes to reducing the use cost; answering the telephone with any tool such as a telephone receiver, a hearing aid earplug and a special traffic earphone is convenient and practical.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
CN201111330Y	CN - 20072110273U - 05/06/2007	QUZHOU HONGLI ELECTRONIC CO LT	H04M 1/60 ; H04B 1/06 ; H04R 25/00	A multifunctional device applicable for ---hearing-------impaired--- people is composed of a chassis, a chassis external landline phone port, a handle, a telephone earphone interface, a hearing aid earphone interface and a circuit. In the circuit, the input end of a function selector circuit is respectively in electric connection with the output ends of a voice pickup circuit and a telephone voice coupling circuit. The output end of the function selector circuit is in electric connection with the input end of an audio power amplification circuit. The landline port is respectively in electric connection with the input ends of the audio amplification circuit, the telephone voice coupling circuit and a signal switch circuit. A power circuit is used to provide the working power supply for each unit circuit. The handle, the telephone earphone interface and the hearing aid earphone interface are arranged on the output ends of the audio power amplification circuit. In the utility model, the functions of hearing aid, telephone sound amplification and FM radio are integrated in one machine to fully meet the use demands of ---hearing-------impaired--- people or people with normal hearing in special occasions. Therefore, the utility model has the advantages of complete functions, simple structure, easy carrying and low use costs.
CN201106800Y	CN - 20072128550U - 28/09/2007	RIMING SCIENCE & TECHNOLOGY CO	F21S 10/06 ; F21V 23/00 ; F21V 33/00	The utility model relates to an improved indicating light structure, which belongs to the electromechanical class, and comprises a main body, a control circuit and a signal judgment panel, wherein, a holding space is arranged in the main body; the control circuit is arranged in the main body, is provided with a detection element in an extending mode, and is connected with a phonetic system which can broadcast and a flasher mechanism which can flash intensively in an extending way; the signal judgment panel is arranged at one side of the main body, and is provided with a lightening group with warning indication. The improved indicating light structure has the advantages that the warning indication can be proceeded according to the overspread condition of the fire so as to reduce unnecessary casualties; by broadcasting voice and producing intense glittering flash light, the sleeping people, the mute and ---deaf--- and the blind men can be informed that fire can break out soon, and escape before the forming of the disaster so as to effectively reduce unnecessary casualties.

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JP2008311805	JP - 20070155914 - 13/06/2007	RION CO	H04R 25/02	PROBLEM TO BE SOLVED: To provide an ear-hook hearing aid which is inconspicuous when worn and easily exchanges tubes. - SOLUTION: The ear-hook hearing air has a tube 4 introducing a sound output from an earphone to an external auditory meatus, an ear mold 5 slidably inserting the tube 4 into a through-hole 5a and an insertion member 8 inserted to the external-auditory meatus side end section 4a of the tube 4. The external-auditory meatus side end section 4a of the tube 4 is held between a wall of the through-hole 5a at the front end of the ear mold 5 and an outer wall of the insert member 8. A stepped section 5b is formed at the through-hole 5a at the front end of the ear mold 5 holding the external-auditory meatus side end section 4a of the tube 4. - COPYRIGHT: (C)2009,JPO&INPIT
JP2008160644	JP - 20060349207 - 26/12/2006	RION CO	H04R 25/02 ; H04R 25/00	PROBLEM TO BE SOLVED: To provide a behind-the-ear hearing aid capable of suppressing a peak generated in frequency characteristics of a path formed by connecting a hook, a tube and a joint. - SOLUTION: In the behind-the-ear hearing aid 1 having the hook 3, the tube 4 and the joint 5 between a hearing aid main body 2 and an earplug 6, the joint 5 is provided with a dumper 8. It is desirable to make a value of an acoustic impedance of the damper 8 within +- 10% of characteristic impedance of the path 7 formed by connecting the hook 3, the tube 4 and the joint 5.
JP2008177920	JP - 20070010431 - 19/01/2007	RION CO	H04R 25/00 ; H04R 25/02	PROBLEM TO BE SOLVED: To provide a behind-the-ear hearing aid which causes no supply voltage reduction and no deterioration in a function as a hearing aid even when high sound pressure is output from an earphone. - SOLUTION: The behind-the-ear hearing aid is provided with a first battery 21 for driving the earphone and a second battery 12 for driving an electric circuit, wherein the first battery 21 is arranged together with the earphone 30 in an earhole-shaped casing 4 to be attached to an external ear canal and the second battery 12 is arranged together with a microphone 10 and a DSP 11 in a hearing aid main body 2. The second battery 12 is a rechargeable battery and even when voltage of one of the first battery 21 and the second battery 12 reduces, the other battery supplies power for the one battery.

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JP2008293865	JP - 20070139854 - 28/05/2007	RION CO	H01M 2/10 ; H04R 25/00 ; H04R 25/02	PROBLEM TO BE SOLVED: To provide an earhole type hearing aid capable of preventing moisture such as sweat or water from eroding a solder part of an electric component even when the moisture intrudes into a battery housing part. - SOLUTION: The earhole type hearing aid having a case internal space formed with a shell 1 and a face plate 2 is provided with a protector 10 isolating a battery housing space 8 constituting the case internal space from a shell internal space 9. The face plate 2 has an opening 5 for battery attachment/detachment formed thereon and is molded integrally with battery contact pieces 12 and 13 by insert-molding. The protector 10 covers a battery B and is formed into a vessel-like shape having an opening 10a, and the opening 5 of the face plate 2 is jointed to the opening 10a of the protector 10. - COPYRIGHT: (C)2009,JPO&INPIT
JP2008295033	JP - 20070117201 - 26/04/2007 ; JP - 20080109862 - 21/04/2008	RION CO	H04R 25/00 ; H04R 25/02	PROBLEM TO BE SOLVED: To provide an earhole-shaped hearing aid which is easily assembled with a shell of an earphone and in which howling hardly occurs. - SOLUTION: The present invention relates to an earhole-shaped hearing aid in which an earphone 5 is disposed inside a shell 2 formed from three-dimensional data of the external auditory meatus and shape data of packaged components. The aid comprises: an adapter 24 for fixing the earphone 5 at a desired position by communicating a sound port 5b of the earphone 5 to a sound port 6 of the shell 2; and an adapter supporting part 23, formed on inner walls of the shell 2, for supporting the adapter 24. When the earphone 5 is mounted onto the shell 2 through the adapter 24, the earphone 5 is not brought into contact with the inner walls 2a of the shell 2. The adapter 24 comprises: an earphone holder 24b holding the earphone 5; a tube 24a inserted into the adapter supporting part 23; and a projecting portion 24c connecting the tube 24a and the earphone holder 24b and being fitted into a recessed portion 30 of the adapter supporting part 23. - COPYRIGHT: (C)2009,JPO&INPIT
JP2008279228	JP - 20070152091 - 14/05/2007	SASAKI FUMIO	A61F 11/04	PROBLEM TO BE SOLVED: To enable disabled people to live securely and safely with this invention. - SOLUTION: A user can identify natural sound, artificial sound, or dangerous sound around him or her by wearing the device at any time. - COPYRIGHT: (C)2009,JPO&INPIT

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JP2008278439	JP - 20070144134 - 01/05/2007	SATO TATSUYA	H04R 25/02 ; H04R 25/00	PROBLEM TO BE SOLVED: To provide a hearing aid which eliminates a closed feeling and discomfort and prevents generation of hauling by ensuring permeability of external air with a surface of the eardrum without sealing the external auditory meatus. - SOLUTION: In a behind-the-ear hearing aid, an external air the external auditory meatus. Furthermore, an opening is provided on a bottom of the main body of the case 11, this opening and the audio path are connected, thereby forming the external air introduction tube 15. - COPYRIGHT: (C)2009,JPO&INPIT
GB2449114	GB - 20070009072 - 11/05/2007	SENTIENT MEDICAL LTD	H04R 25/00 ; A61F 2/18 ; H04R 17/00	A middle ear implant 10 comprises a piezoelectric stack 12 as an actuator, piston means 14 joining a first end of the actuator to the stapes (stirrup) footplate 28, fixing means 16 attached to a second end of the actuator for securing the implant to an ossicle 26, a transducer for detecting sound, processor and amplifier means and a power supply. The stack and piston are coaxial and the fixing means is at right angles to their common axis. The piston means may extend around the piezoelectric stack and provide support for it. The actuator may be provided with a biocompatible coating that may also provide support for the structure. The ossicle to which the implant is attached may be the incus (anvil) long process.
CN101297781	CN - 20081039178 - 19/06/2008	SHANGHAI LISHENGTE MEDICAL TEC	A61F 11/04 ; A61F 2/18 ; A61N 1/18	The invention discloses a sealing structure of an artificial cochlear implant and a packaging technology thereof, the sealing structure comprises: a circuit and a chip, which is characterized in that the circuit is arranged on a circular thin-sheet base plate, a welding ring and a contact point which is electrically connected with the circuit are arranged on the base plate, a connecting ring is annular and fixedly connected with the base plate; the chip is welded on the circuit; an upper end cover and a lower end cover are arranged outside the base plate, the upper end cover, the lower end cover and the welding ring are fixedly connected to form a sealing outer shell; the packaging technology specifically comprises that: the circuit, the welding ring and the base plate are sintered to a whole body by ceramics; the welding chip uses a biological coating layer to carry out the first packaging; the upper end cover and the lower end cover are produced to carry out the second packaging of the implant; and a biological silicon rubber is used for carrying out the third packaging of the upper end cover and the lower end cover.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
CN201139652Y	CN - 20072199280U - 14/12/2007	SHANGHAI LISHENGTE MEDICAL TEC	A61F 2/18 ; A61F 11/04	The utility model relates to an encapsulation die of a cochleaimplantat implant device, which comprises a lower titanium housing section at the left side of a soleplate and a lower electrode section at the right side of the soleplate, wherein, the upper part of the lower titanium housing section is respectively provided with an upper right titanium housing section and an upper left titanium housing section; a space capable of arranging the titanium housing is arranged between the lower titanium housing section and the upper right titanium housing section and the upper left titanium housing section; the outer side of the space is provided with a first guide chute and a first demoulding hole; the upper left titanium housing section is provided with a magnet for fixing the cochleaimplantat implant device; the upper part of the lower electrode section is respectively provided with a first upper electrode section and a second upper electrode section; a space capable of arranging the electrode section is arranged between the lower electrode section and the first upper electrode section and the second upper electrode section.
CN101240319	CN - 20071037169 - 06/02/2007	SHANGHAI ZHUJIAN BIOLOG ENGINE	C12Q 1/68 ; C12N 15/11	The invention discloses a agent box for detecting infant medicaments deafness heredity risks. The agent box comprises specificity primer and DNA sequencing primer for detecting four sites polymorphism on detection MTRNR1 gene, PCR reaction component and PCR outcome yield purifying component etc.. The agent box of the invention assesses infant medicaments deafness heredity risks by detecting four sites polymorphism on detection MTRNR1 gene correlative closely to infant medicaments deafness heredity risks.
CN101301240	CN - 20081067315 - 21/05/2008	SHENZHEN GRADUATE STUDENT ACAD	A61F 11/04 ; A61N 1/36 ; G10L 15/02 ; G10L 15/04 ; G10L 15/14	An electronic cochlea Chinese fixed electrostimulation amplitude variation pattern exosomatic speech processing device comprises an audio amplification sampling module, a storage module, a digital signal processor and a signal transmission module, wherein the speech signal processing program of the device comprises a preprocessing unit, an endpoint detecting unit, a speech recognition unit and a feature coding unit; the feature coding unit has a fixed electrostimulation amplitude variation pattern library and a stimulation patter selecting and adjusting module; moreover, the feature coding unit selects a corresponding electrostimulation amplitude variation pattern from a fixed electrostimulation pattern library according to the recognition result of a speech section, and adjusts an electrode channel selection pattern, a stimulation speed variation pattern and stimulation time, thereby finally generating a holonomic electrostimulation parameter corresponding to each stimulation electrode.

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JP2008148861	JP - 20060338814 - 15/12/2006	SHIBA RYOICHI	A63F 9/04	PROBLEM TO BE SOLVED: To provide a polyhedron dice for games which enables play of a game for a baby, a child, a blind person, a ---deaf----mute, an agnosia patient, etc. to perform number calculation and memorization and can effectively function also in rehabilitation through the game. - SOLUTION: The game can be played in which one figure as well as at least one of braille corresponding to the figure and a sign language figure are displayed on each of the surfaces of a hollow polyhedron, a solid small piece is enclosed in the internal space of the polyhedron, a figure displayed on one surface defined beforehand in the polyhedron in case the solid small piece collides with the internal wall surface of the polyhedron by throwing out the polyhedron on the level surface, rolls while emitting a sound, and ceases to sound simultaneously with the rolling suspension of the polyhedron is read through figure display, braille display or sign language figure display, and the number calculation and the memorization are performed based on the read figure. - COPYRIGHT: (C)2008,JPO&INPIT
CN201107863Y	CN - 20062036872U - 28/12/2006	SICHUAN MICRO DSP DIGITAL TECH	H04R 25/00	The utility model provides a hearing aid which is hidden in a coat and relates to the hearing auxiliary equipment technology field. The hearing aid includes a signal collector, a signal transmission line, a hearing aid processor and a headphone. The signal collector is arranged on the upper part of the coat. The hearing aid processor is arranged on the coat and is communicated with the signal collector through the signal transmission line. The hearing aid is simultaneously provided with the functions of the hearing aid and the coat and is especially applicable to the aged and the ---disabled--- with ---hearing--- loss and inconvenient action.
CN201139569Y	CN - 20072082095U - 23/11/2007	SICHUAN MICRO DSP DIGITAL TECH	A61B 5/12 ; A61B 5/00	The utility model discloses a portable tinnitus detecting device, which comprises a signal generator for producing various sound signals, a magnifier which is connected with the signal generator and performs magnifying processing for the sound signals, as well as an earphone which outputs the sound signals after the magnifying processing. A controller which controls the signal generator to produce the sound signals and controls the magnifying strength of the magnifier is connected between the signal generator and the magnifier. The portable tinnitus detecting device adopts a common earphone to perform the tinnitus detection, thereby a relay and a photocoupler are omitted, and the circuit is simplified.

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CN201139570Y	CN - 20072082096U - 23/11/2007	SICHUAN MICRO DSP DIGITAL TECH	A61B 5/12	The utility model discloses a double-passage double-signal source sonometer, which comprises a signal source part, a volume control part and a transduction output part, which are communicated in sequence. The signal source part is divided into two paths of apposite digital signal sources, wherein, each digital signal source comprises a digital signal processor which generates pure tone signals and/or noise signals, a control switch which is connected with the digital signal processor and converts the continuous pure tone signals and/or noise signals into discontinuous pure tone signals and/or noise signals. The volume control part is divided into two paths of apposite volume control branch circuits, and any one volume control branch circuit comprises a power amplifier and an attenuator, which are communicated with the control switch in sequence.
AT417484T	DE - 200510006856 - 15/02/2005	SIEMENS AUDIOLOGISCHE TECHNIK	H04R 25/00 ; H01H 25/04 ; H04R 25/04 ; H05K 1/18	A hearing aid has an input converter/microphone (2) and an output converter/receiver (5). A signal processing unit can be adjusted by an operator element actuated by the user, in which the operator element has electric contacts (10) and can be rotated about a first axle (8) and also swiveled around a second axle (9). Electrical components (4) of the signal processing unit are arranged on a circuit board (3).
DK1601232T	DE - 200410025691 - 26/05/2004	SIEMENS AUDIOLOGISCHE TECHNIK	H04R 25/00	Hearing aid or hearing aid system with operating device, has at least one operating element associated with different setting functions depending on results of signal analysis The device or system has an input converter (1) for receiving an input signal and converting it into an electrical signal, a signal processing unit (2) for processing the electrical signal, an output converter (3), an operating device for outputting an output signal, with at least one operating element (7) for setting parameters or influencing the signal processing unit and an analysis arrangement for analyzing the input signal. The operating element is associated with different setting functions depending on the results of the signal analysis.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
EP1965605	DE - 200710010011 - 01/03/2007	SIEMENS AUDIOLOGISCHE TECHNIK	H04R 25/02 ; H04R 25/00	With housing elements of a hearing device which are fastened to a frame for accommodating internal components of the hearing device, the use of a large number of additional parts is problematic because of the risk of losing parts. In accordance with the invention a snap-on fastening means is used to fasten a housing element to the frame of the hearing device, with an opening being provided in the housing element and the frame for accommodating the snap-on fastening means.
CN101291550	US - 19980213623 - 18/12/1998	SIEMENS HEARING INSTR INC	A61F 11/00 ; H04R 25/00 ; H04R 25/02	A microphone of the dual-inlet type is installed in an In-The-Ear ("ITE") hearing aid. First and second outwardly-diverging channels are located in the faceplate, to connect the inlets of the microphone to two spaced-apart ports in the faceplate.
EP1978783	US - 20070696352 - 04/04/2007	SIEMENS HEARING INSTR INC	H04R 25/02	A construction of a CIC instrument is provided, along with a corresponding method of manufacturing such a CIC instrument, that prevents floating components from contacting with an insulated receiver and, therefore, assures feedback-free operation. This is achieved through the presence of a compartment for the receiver in which the receiver resides, and a cover placed on top of the receiver compartment in a mating recess of the receiver compartment.
US2008247578	US - 20070696435 - 04/04/2007	SIEMENS HEARING INSTR INC	H04R 25/02	In order to reduce feedback in a hearing aid, a hearing aid receiver is provided that comprises a housing having an inside surface and an outside surface, a motor, an active armature that is attached to the motor and attached to the inside surface of the housing, the active armature being driven in a vibrational manner by the motor, and an external passive component that is attached to the outside surface of the housing, the external passive component designed to vibrate in a direction opposed to vibrations of the active armature. A corresponding method for operating such a hearing aid receives is also provided.

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CN201105090Y	CN - 20072151998U - 21/06/2007	SIEMENS LTD	A61N 1/36 ; H04R 25/00	The utility model relates to the field of Chinese medical science, especially a combined device of the acupuncture and the hearing aid. The combined device of the acupuncture and the hearing aid comprises a hearing aid, and the hearing aid has a processing unit and a casing worn on the auricle. The utility model is characterized in that the utility model also comprises: at least one raised electrode is arranged on the external surface of the casing which contacts with the skin to contact with the puncture point of the ear part of the sufferer; the inner of the casing is also provided with the following devices: an oscillating circuit, which is used to produce the pulse current and is connected with the power control module; a power control module, which is used to enlarge the pulse current and is connected with the electrode, and can provide the electrode with the current of simulating the puncture point; the process unit of the hearing aid is also connected with the oscillating circuit to control any time and in any place, and the combination with the hearing aid is portable.
CN101312602	DE - 200710018121 - 16/04/2007	SIEMENS MEDICAL INSTR PTE LTD	H04R 25/00 ; H04R 25/02	Power saving control on an earphone is performed free from interference basically when performing wireless data transmission with other audiphones. Therefore, the invention relates to hearing aids, particularly to audiphones, comprising a transmitting device for wireless data transmission; a loudhailer; and a control device for controlling the signals by the loudhailer, wherein the frequency spectrum of the control signal in the range of basic frequency has a main recess (E). 'Noise shaping' is realized through the earphone control signal modulated through pulse density.
EP1998594	DE - 200710025080 - 30/05/2007	SIEMENS MEDICAL INSTR PTE LTD	H04R 25/02	The support (10) has a recess (14) comprising a base (15), in which a battery (17) is inserted, so that the battery is fixed in a main extension plane of a carrier by a wall of the recess and in an insertion direction by the base. A battery contact (16) is arranged in the recess on the base, and the support carries a hearing device amplifier, which is electrically connected with the battery contact. A contact spring is soldered on a surface of the support and forms an electrical contact to the battery inserted in the recess.
EP2003932	EP - 20070011832 - 15/06/2007	SIEMENS MEDICAL INSTR PTE LTD	H04R 25/02 ; H04R 25/00	The hearing aid has a housing (24), which is cylinder shape, and an ear piece (22) is accommodated in the housing. The ear piece is formed cylinder like and the inner diameter of the housing and the outer diameter of the earpiece are adaptable at each other and a cylinder shape battery (20) is provided in the hearing aid.

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EP2007173	DE - 200710028230 - 20/06/2007	SIEMENS MEDICAL INSTR PTE LTD	H04R 25/02	The closing element (20) comprises a disk-shaped central part (21) and a column part (15), which stands before one side of the disk-shaped central part. The column part is provided at a free end of the disk-shaped central part. Another column part (24) stands before another side of the disk-shaped central part, where another column parts (25,26) are provided at another free end of the disk-shaped central part. An independent claim is also included for a method for smoothing or coating two casings for a hearing device in a tumbling process.
US2008194984	US - 20060885919 - 16/03/2006 ; US - 20050662256P - 16/03/2005 ; WO - 2006US09418 - 16/03/2006	SONICOM INC	A61B 5/00	A test battery method and system (10, 100, 200, 225) for use in assessing auditory function (e.g., the screening or diagnosis of ---impairments---, fitting of ---hearing--- aids, etc.) is provided which performs one or more auditory tests including, for example, an acoustic reflectance test. Such an acoustic reflectance test may be a reflectance tympanometry test that includes a feedback system to control static pressure in the ear canal. Such acoustic reflectance tests may be used alone or in combination with one or more other auditory tests. Further, for example, such a battery of tests may include middle-ear muscle reflex tests in combination with one or more other auditory or hearing tests.
BRPI0518161	US - 20040618136P - 14/10/2004 ; WO - 2005CA01594 - 14/10/2005	SONOMAX HEARING HEALTHCARE INC	H04R 1/10 ; A61F 11/08 ; H04R 25/02	A presente invenção refere-se a uma interface interna de ouvido, que compreende um módulo de ouvido modelado para ser pelo menos parcialmente recebido dentro de um canal auditivo, O módulo de ouvido tendo um núcleo que define um furo de som para permitir a transmitância de som para dentro do canal auditivo. Uma bainha que cobre uma porção de uma superfície externa do núcleo de modo a definir um espaço expansível entre a bainha e o núcleo. Uma abertura definida no núcleo que comunica com o espaço expansível por meio de que o espaço expansível está adaptado para receber um composto curável para expandir o módulo de ouvido para a forma do canal auditivo. Um inserto preso no módulo de ouvido e que tem uma porção delgada recebida pelo menos parcíalmente dentro do furo de som para manter geralmente uma forma do furo de som durante a recepção e a cura do composto curável dentro do espaço expansível.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
JP2008272373	JP - 20070122689 - 07/05/2007	SONY ERICSSON MOBILE COMM JP	A61H 3/06	PROBLEM TO BE SOLVED: To allow the visually-impaired to move at ease in a location where he/she has gone and easily charge batteries equipped in a walking aid stick. - SOLUTION: This charging system of the walking aid stick consists of a battery charger 3, a user-worn terminal 2 worn on the visually-impaired 7 and having a speaker, and the walking aid stick 1. This system is configured to be easily charged by just applying the tip of the walking aid stick 1 to a charge terminal of the battery charger 3. When a charge button of the walking aid stick 1 is pushed, the walking aid stick 1 accesses to a server that manages information showing the installation place of the battery charger 3 and acquires the information of the installation place of the battery charger 3 positioned closest to the visually-impaired 7. The information is transmitted to the user-worn terminal 2 and is informed to the visually-impaired 7 by the speaker of the user-worn terminal 2. The visually----impaired--- 7 ---hears--- the information showing the installation place of the battery charger 3 by voice, goes to the battery charger 3 and charges the batteries of the walking aid stick 1. - COPYRIGHT: (C)2009,JPO&INPIT
WO2008086286	US - 20070883704P - 05/01/2007	SOUND ID ; ATAMANIUK ANDY P ; PERKINS RODNEY ; PAVLOVIC CASLAV V ; MICHAEL NICHOLAS R	H04R 25/00	L'invention concerne un module auriculaire, lequel peut être porté en alternance ou sur l'oreille droite ou sur l'oreille gauche, qui comprend un lobe intérieur, conçu afin de s'adapter à l'intérieur de la conque, comprenant un haut-parleur et un ensemble couverture / élément de compression. L'ensemble couverture / élément de compression peut être positionné, typiquement de façon rotative, par rapport au reste du lobe intérieur entre les orientations de l'oreille droite et gauche afin de permettre au module auriculaire d'être porté ou sur l'oreille droite ou sur l'oreille gauche. Un procédé d'amélioration de la qualité du son émanant du module auriculaire inclut la sélection d'un canal acoustique à l'intérieur du module auriculaire afin d'aider à améliorer la réponse de fréquence du module auriculaire de sorte à ce que le module auriculaire présente un pic de résonance proche de 2.7 kHz et un maximum de 20 dB de réduction dans la réponse haute fréquence mesurée à 5 kHz de la réponse de fréquence moyenne mesurée à 500 Hz, 800 Hz, et 1600 Hz.

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JP2008199192	JP - 20070030652 - 09/02/2007	STARKEY JAPAN CO LTD	H04R 25/02 ; H04R 25/00	PROBLEM TO BE SOLVED: To reduce a feeling of inarticulation of sound that an ear hole type hearing aid user has by making a vent hole much larger than heretofore. - SOLUTION: The hearing aid includes a shell (10) forming the external shape of the hearing aid, a vent hole (20) linking an outer side and a front inner side of the shell (10) to each other, a microphone (13) disposed on the outer side of the shell (10), and a receiver (14) disposed on the front inner side of the shell (10). The vent hole is made as large as possible as long as an audio processing unit can suppress howling. Thus, the large vent hole is formed, so a feeling of inarticulation of a sound that the user has is greatly reduced.
JP2008199193	JP - 20070030653 - 09/02/2007	STARKEY JAPAN CO LTD	H04R 25/00 ; H04R 25/02	PROBLEM TO BE SOLVED: To reduce a feeling of inarticulation of a sound that an ear hole type hearing aid user has by making a vent hole much larger than heretofore. - SOLUTION: The hearing aid comprises a shell (10) forming the external shape of the hearing aid, a vent hole (20) linking an outer side and a front inner side of the shell (10) to each other, a microphone (13) disposed on the outer side of the shell (10), and a receiver (14) disposed on the front inner side of the shell (10). A bypass wall (25) is formed at an outer opening of the vent hole (20) without closing the vent hole (20). Flexibility of design associated with the size of the vent hole is ensured and a feeling of inarticulation of a sound that the user has is reduced.
CA2632077	US - 20070940041P - 24/05/2007	STARKEY LAB INC	H04R 25/00 ; H04R 25/02 ; H05K 9/00	Disclosed herein, among other things, is a hearing assistance device apparat us with a capacitive switch. According to various embodiments, the apparatus include s a BTE housing, hearing assistance electronics housed in the housing and a capaciti ve switch connected to the hearing assistance electronics and adapted to detect a wearer when the BTE housing is worn..

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
CA2626652	US - 20070689354 - 21/03/2007	STARKEY LAB INC	H04R 25/02 ; H01M 2/10 ; H01R 13/703	La présente invention concerne un système permettant de déterminer la capacité auditive d'un individu. Ce système est constitué d'un générateur permettant de générer un signal de stimulus de test, une prothèse auditive (2) dotée d'un processeur de signal numérique permettant de traiter ledit signal de stimulus de test et de le convertir afin de produire un signal de stimulus acoustique ainsi qu'un moyen de synchronisation primaire. Le système comprend également un instrument électrophysiologique (1) doté de moyens de synchronisation secondaires ainsi que de moyens (7) permettant d'établir à partir dudit individu une réponse évoquée par ledit signal acoustique. Les moyens de synchronisation primaires et secondaires échangent un signal de synchronisation afin de synchroniser ladite réponse évoquée audit signal de stimulus acoustique. L'invention concerne également une prothèse auditive ainsi qu'un procédé permettant d'effectuer une mesure électrophysiologique de la capacité auditive d'un individu.
CA2626188	US - 20070895679P - 19/03/2007	STARKEY LAB INC	H04R 25/00 ; G10K 11/04 ; H04R 25/02	The present application relates to vented earmolds for hearing assistance devices. Some vented earmolds include a first vent and a second vent to provide acoustic benefits to the user. Such benefits fit within the ear canal, the earmold including an internal air volume; a first vent with an acoustical passage connecting the internal air volume of the earmold to the residual ear canal air volume, and a second vent with an acoustical passage connecting the internal air volume of the earmold to a first opening to the internal air volume, wherein the first vent and the second vent are designed to reduce the acoustical feedback gain.

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CA2625899	US - 20070689358 - 21/03/2007	STARKEY LAB INC	H04R 25/02 ; H04L 12/28	One embodiment of the present subject matter provides an apparatus for disposition between a pinna and a head of a user, the apparatus including a behind-the-ear housing, the housing having a first lateral side located adjacent the user's ear and a second lateral side located adjacent the side of the user's head when the apparatus is worn as directed, hearing assistance electronics disposed in the behind-the-ear housing, and a control disposed on at least one lateral side of the behind-the-ear housing, the control coupled to the bearing assistance electronics.
CA2625236	US - 20070689362 - 21/03/2007	STARKEY LAB INC	H04R 25/00 ; H04R 25/02	Disclosed herein, among other things, is an apparatus for connection to a hearing assistance device having a DAI compatible interface compatible with direct audio input (DAI) signals. According to an embodiment, the apparatus includes a connector to connect to the DAI-compatible interface. The connector includes audio and ground connections compatible with the DAI-compatible interface. The connector further includes a power connection adapted to provide power to the hearing assistance device. The apparatus also includes a power source electrically connected to the connector. The power source is adapted to charge one or more energy storing devices, such as batteries, within the hearing assistance device, according to various embodiments. In an embodiment, the power source is adapted to supplement power provided to the hearing assistance device by the one or more energy storing devices within the device.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
US2008260191	US - 20080163665 - 27/06/2008 ; US - 20030660454 - 11/09/2003	STARKEY LAB INC	H04R 25/00	Ear-level full duplex audio communication systems each include one or two ear attachment devices, such as in-the-ear (ITE) or behind-the-ear (BTE) devices, that wirelessly communicates to a remote device such as a computer, a personal digital assistant (PDA), a cellular phone, a walkie talkie, or a language translator. When used as a hearing aid, such a system allows a ---hearing--- ---impaired--- individual to communicate with or through the remote device, such as to talk to another person through a cellular phone. When being used as an ear piece wirelessly extended from the remote device, such system allows an individual with normal hearing to privately communicate with or through the remote device without the need of holding the device or wearing any device wired to the remote device. Each ear attachment device includes a voice operated exchange (VOX), housed within the device, to preserve energy and hence, maximize the period between battery replacement or recharges. The VOX also gates various sounds detected by the system to control possible echoes and ringing.
US2008260192	US - 20080102602 - 14/04/2008 ; US - 20070912343P - 17/04/2007	STARKEY LAB INC	H04R 25/02 ; H04R 25/00	An embodiment of a hearing assistance apparatus for performing a Real Ear Measurement (REM), comprises a hearing assistance device housing, a microphone within the housing, an earhook connected to the housing, and a flexible tube. The house has a first opening for guiding sound into the housing to the microphone. The housing and the connected earhook form an interface, where the earhook has a shape to provide a slot near the interface of the housing and the earhook. The tube guides sound, and has a first end and a second end. The first end of the flexible tube and the slot of the earhook cooperate to retain the first end of the flexible tube in the slot of the earhook and flush with the housing to provide a sound-tight connection with the first opening.
US2008304685	US - 20080190499 - 12/08/2008 ; US - 20040824775 - 15/04/2004	STARKEY LAB INC	H04R 25/02 ; H04R 25/00	A method and apparatus for a modular hearing aid for a user having a hearing canal, including a housing adapted to fit within at least a portion of the hearing canal, and having at least one access port, a cover adapted for at least partially covering the at least one access port, and signal processing electronics connected to a microphone and a power supply. In various examples, a microphone housing is adapted to mount to the housing and to fit within the at least one access port, and to connect to the microphone, the signal processing electronics and the power supply. In one variant, the apparatus includes a receiver connected to the signal processing electronics, and a fastener as a unitary connector of the cover and microphone housing to the housing. Other variations are presented herein.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
US2008201743	WO - 2004FI00389 - 24/06/2004	STEVENS BENJAMIN GORDON ; SCHNEPF KURT	G06F 3/00	The method is for facilitating the watching of films, TV programs and the like, meant for ---deaf--- people and people with ---hearing--- ---impairment---. The method allows a transparent or translucent shadow-graph to be produced on the screen.
DE102007026574	DE - 200710026574 - 08/06/2007	STORZ KARL GMBH & CO KG	A61B 17/32 ; A61B 17/56 ; A61F 2/18 ; B26D 1/30 ; B26D 7/02 ; G01N 1/04 ; G01N 33/48	The arrangement has a clamp (2) for clamped fixing of a block of tissue and at least one cutter (3) for processing the block of tissue held in the clamp. The clamp has at least two clamping jaws, whereby at least one clamping jaw is adjustable relative to the at least one other clamping jaw. An independent claim is also included for a cutting device for preparing tissue plates, especially cartilaginous plates.
US2008200831	US - 20080081156 - 11/04/2008 ; EP - 20030388009 - 07/02/2003 ; US - 20040772426 - 06/02/2004	STURZEBECHER EKKEHARD	A61B 5/12 ; A61B 5/0484	The invention relates to a method for objective verification of auditory steady-state responses (ASSR) in the time domain whereby the individual epochs are transformed into the frequency domain. The response can be made free from noise of the asynchronous EEG in the frequency domain; the amplitudes of the spectral lines, which contain only noise, are set at zero, and the spectral lines of the harmonics remain uninfluenced. The altered spectrum is subsequently transformed back into the time domain.
JP2008158055	JP - 20060344338 - 21/12/2006	SUMITOMO CEMENT COMPUTERS SYST ; UNIV OF SCIENCE TOKYO	G09B 19/04 ; G09B 5/06 ; G09B 19/06 ; G10L 11/00 ; G10L 15/00 ; G10L 15/24	PROBLEM TO BE SOLVED: To support the acquisition of language through practicing mastering correct pronunciation so that a user can make himself/herself understood and have a conversation in the language. - SOLUTION: By combining an image analysis technology by a pronunciation evaluating device 45 and speech analysis, the lip movements are traced and analyzed. That means, besides performing speech processing of speech data by a speech evaluation decision processing section 44, analysis of video data photographing the lip movements is carried out. Thus, whether the pronunciation is correct can be determined.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
US2008247590	US - 20070695934 - 03/04/2007	SUN WEN-WEI	H04R 25/02	An over-the-ear hook is a one-piece tube that can hold an earphone for conducting sounds to the wearer's ear canal. The tube can be adjustable to the wearer's ear shape so as to allow the over-the-ear hook to rest securely behind any wearer's ear. To form an integral unit comprising the over-the-ear hook and the earphone: snugly ensconce the cable of said earphone in the groove cut in the surface of said tube as the opening of the groove is smaller than the diameter of said cable. The earphone can be easily detached from the over-the-ear hook after use for separate storage. Under the circumstances, the earphone cable needs not enlacing the over-the-ear hook for space-saving storage and would not be damaged thereof.
GB2446833	GB - 20070003348 - 21/02/2007	SUNPEX TECHNOLOGY CO LTD	G08B 21/02 ; G08B 3/00 ; G08B 23/00	A voice help-calling system for a scooter, e.g. as used by the aged or disabled, which comprises a help-calling switch 1, a CPU 2 connected with the electronic system of the scooter and a voice IC 4 connected with the help-calling switch 1 and the CPU 2. The voice IC 4 is recorded with help-calling sound effect in advance, and then connected to an audio amplifier 5, in turn, to a speaker 6. In this manner, the voice help-calling system is triggered in case of discomfort or distress of the user, or breakdown of the scooter to effectively catch the attention of a passerby for help. The voice IC 4 may additionally be connected to a hearing-aid earphone 7 so that a ---hearing--- ---disabled--- person can confirm the output of the help-calling sound effect.
EP1977770	EP - 20070251371 - 29/03/2007	TAI-HER, YANG	A61L 9/12 ; A61L 9/03 ; A61L 9/14 ; G04B 25/00	A timer controlled olfactory fragrance dispenser that has the olfaction as the interface to aid time telling while the conventional clock works on the sense of hearing and/or sight as the interface for time telling; providing additional funs and sense of comfort, the present invention allows its user to "smell" the time when he/she is in the dark or in sleeping, and the blind and/or the ---deaf--- to "smell" the changes of time; and allowing to be preset for emitting fragrance of different odors, the lapse between two emissions or the concentration of the fragrant; and may be made in a portable form to satisfy personal needs.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
CN101229090	US - 20010340271P - 18/12/2001	TINNITUS CONTROL INC	A61F 11/00 ; A61B 5/00 ; A61B 5/12 ; A61M 21/00 ; G10K 11/00 ; G10K 11/178 ; G10K 15/02 ; H04R 25/00	Reciprocal noise cancellation of a patient's mono-frequency tinnitus tone is achieved utilizing an externally generated tone which is subjectively defined by a mono-frequency tinnitus patient to match his/her tinnitus tone in frequency and amplitude. An externally generated sound wave, selectively designated by subjective observations of a patient to match the patient's tinnitus tone is first applied to the tinnitus patient via earphones or a speaker system and then the same externally generated sound wave is sequentially phase shifted through a plurality of angularly shifted sequence steps to shift or slide the external sound wave through at least a 180 degree phase shift of the generated signal as it is applied to the patient to achieve a series of reductions of the patient's tinnitus tone and in one of such shifted steps a reciprocal,; canceling relationship with the patient's tinnitus tone.
WO2009002539	US - 20070937272P - 25/06/2007 ; US - 20070001209P - 30/10/2007	TINNITUS OTOSOUND PRODUCTS LLC ; MATERNA ANTHONY T ; VIIRRE ERIK ; PINEDA JAIME A ; MOORE F RICHARD		L'invention porte sur un système pour fournir une thérapie pour un acouphène. Un système intégré est développé pour une mise en oevre d'une thérapie sonore personnalisée (CST). Le système de CST est utilisé par une personne qualifiée pour tester et traiter un patient. Un mode de réalisation de la présente invention comprend un système qui comprend : (1) une station de correspondance de sons (SMS), qui est un dispositif électronique dédié ayant un système de traitement comprenant une application de CST, un compilateur acoustique pour générer des sons de CST, une interface graphique utilisateur (GUI), une sortie pour une sortie de fichier audio numérique haute qualité ; (2) un dispositif audio pour une lecture de sons de CST au patient. Dans un mode de réalisation, le dispositif audio comprend un lecteur audio portable (PSP). Le PSP utilisant une lecture stéréophonique convertit le fichier audio numérique en sons de CST, qui peuvent être écoutés à travers une paire d'écouteurs haute fidélité fournis au patient et au testeur.
JP2008220805	JP - 20070066276 - 15/03/2007	TOPCON CORP	A61B 3/028 ; A61B 3/02 ; A61B 5/12	PROBLEM TO BE SOLVED: To provide an optometer capable of easily continuously executing an optometry and an audiometry. - SOLUTION: Test sound output devices 23 for outputting a test sound for testing the hearing acuity of the subject 12 are arranged in a correction apparatus 14 selectively disposing corrective lenses 22 for correcting the visual performance of the respective subject's eyes 12 and 12b viewing a visual target 11 though a pair of optometric windows 21 in the respective optometric windows 21 respectively.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
JP2008210132	JP - 20070045954 - 26/02/2007	TOSHIBA CORP	G06F 17/28 ; G10L 13/00 ; G10L 15/00 ; G10L 15/24	PROBLEM TO BE SOLVED: To provide a voice translation device improving translation accuracy. - SOLUTION: This voice translation device has: a related information storage part 121 associating and storing a name of related information and a display position of the related information; an example storage part 122 associating and storing an example of an original language and a semantic class expressing a semantic attribute of a term, and an example of an object language; a dictionary storage part 123 associating and storing the name of the related information and the semantic class; a voice reception part 101 receiving voice; a selection reception part 102 receiving selection of the related information; an acquisition part 104 acquiring the name of the related information corresponding to the display position of the received related information from the related information storage part 121, and acquiring the semantic class corresponding to the acquired name of the related information from the dictionary storage part 122; a recognition part 103 recognizing the received voice; and a translation part 105 translating a recognition result by acquiring the example of the objective language corresponding to the recognition result of the recognition part 103 and the acquired semantic class from the example storage part 122.
JP2008272131	JP - 20070117857 - 27/04/2007	TOSHIBA CORP ; TOSHIBA MEDICAL SYS CORP ; TOSHIBA MEDICAL SYS CO LTD	A61B 6/04	PROBLEM TO BE SOLVED: To securely transmit necessary instructions with no voices to a subject with visual or ---hearing--- ---impairment--- during X-ray photographing. - SOLUTION: A vibration motor 6 is provided at each of handles 32L and 32R installed on both the sides of a bed means 3 of an X-ray diagnostic apparatus. These vibration motors are controlled to selectively turn on and off by the operation of their pushbutton switches 71L and 71R. By these arrangements, one or both of the bed side handles are vibrated to transmit various messages to the subject grasping these handles without using letters or voices. Accordingly they can give not only a normal subject but one with visual or ---hearing--- ---impairment--- appropriate instructions necessary for taking his X-ray photographs. This reduces the subject's trouble related with X-ray photographing and improves the entire diagnostic throughput.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
CN101310695	CN - 20071109202 - 21/05/2007	UNIV HONG KONG CHINESE	A61F 11/04 ; G10L 21/00 ; H04M 1/21 ; H04M 11/00	The invention discloses an artificial electronic cochlea based on a mobile phone by combining voice tone information, which pertains to the fields of the electronic information technology and the medical apparatus and instruments. The device of the invention comprises a voice processor which is arranged in the mobile phone and provided with a voice tone information fetching module, a multi-channel pulse signal transmitter connected with the mobile phone, a pulse signal receiver and a stimulating electrode implanted in an ear. The voice processor is realized by a micro processor in the mobile phone and can magnify and digitally process a plurality of voice signals provided by the mobile phone and decompose the voice signals into multi-channel electric signals used for adjusting the amplitude of electrical impulse; the voice tone information fetching module of the voice processor fetches the voice tone information from the voice signals to adjust the stimulating speed of the multi-channel electrical impulse. Electrical impulse is finally sent to the stimulating electrode implanted in the ear by the transmitter and the receiver in the ear to directly stimulate the residual auditory nerve of an inner ear and to recover the hearing of profound ---hearing--- ---impairment--- sufferers.
DE102007026631	DE - 200710026631 - 06/06/2007	UNIV ROSTOCK	H04R 25/02 ; A61F 2/18 ; A61N 1/05 ; A61N 1/36	The invention relates to an ear implant and a stimulation electrode for an ear implant. The aim of the invention is to provide an ear implant and a stimulation electrode for an ear implant, which provide improved neurostimulation and/or muscle stimulation compared to conventional cochlear implants. The stimulation electrode according to the invention consists of a long base body (7), on the outer surface of which a plurality of electromechanical transducers (8) and a plurality of electrical stimulation elements (10) are arranged, the base body (7) comprising a plurality of inner control lines (11, 12) which are electrically insulated from each other and have a surrounding sleeve.
DE102007026057	DE - 200710026057 - 01/06/2007	UNIV ROSTOCK	A61B 5/042 ; G01R 19/00 ; H04R 25/02	The present invention relates to an electrode and a measuring device for measuring the action current and/or the action potential of an electrically active tissue. The aim of the present invention is to provide an electrode for measuring action currents and/or action potentials in electrically active tissues that can be produced in a simple and cost-effective manner that, on the one hand, guarantees a safe but reversible fixation of the electrode in the muscle tissue and, on the other hand, traumatizes the muscle tissue as little as possible.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
WO2008129259	GB - 20070007461 - 18/04/2007	UNIV SUNDERLAND ; CASSIDY BRENDAN MICHAEL ; COCKTON GILBERT	G09B 21/00 ; G07F 7/00 ; G07F 17/00 ; G07F 19/00	A method and apparatus for providing information to an operator of a device, such as a currency dispensing machine, is disclosed. The apparatus includes a surface, for example a keypad, that is touched by an operator. The keys of the keypad vibrate in response to an input signal. By reference to a reference location, a centrally located key, the vibration indicates to the operator a direction. Variation in the intensity or duration of vibration pulses is also used to indicate distance or can be used to provide other information.
JP2008287340	JP - 20070129363 - 15/05/2007	UNIV TOKAI	G06T 7/20 ; G10L 15/10 ; G10L 15/24	PROBLEM TO BE SOLVED: To provide a speech content identification apparatus capable of reducing an identification error at the time of identifying speech content from the movement of lips, and to provide an individual identification apparatus capable of identifying an individual from characteristics of the movement of the lips. - SOLUTION: The speech content identification apparatus 1 identifies the speech content from the movement of the lips by acquiring the movement of the lips of a speaking person from an image of a part of the lips which is imaged by imaging means 2 when the speaking person is speaking, and comprises image processing means 3 for extracting a position of a feature point of a part of the lips, operation measuring means 5 for measuring an operation history graph, data converting means 7 for converting to an operation spectrum graph, vowel matrix producing means 9a for producing a vowel matrix, and a speech content identifying means 9 for identifying the speech contents.
WO2008110016	US - 20070918070P - 15/03/2007	UNIV WESTERN ONTARIO ; PARSA VIJAY	A61B 5/12 ; A61B 5/00 ; A61B 5/16 ; G10L 11/00 ; H04R 3/00	L'invention concerne un système et un procédé qui sont utilisés pour une évaluation des fonctions auditive et vocale par des Audiologistes et des Orthophonistes. Le système comprend un dispositif portatif et soit un écouteur sans fil, soit microphone sans fil, ou les deux. Les écouteurs sans fil peuvent recevoir un signal sonore et générer un signal sonore émis ayant un niveau sonore entre 0 et 100 dB et une plage de fréquence entre 20 Hertz et 20 KHz et peuvent ajuster le signal sonore en réponse à un signal de commande. Le système peut également comprendre un microphone adapté pour recevoir un signal vocal et qui peut générer le signal sonore et générer le signal de commande.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
CN201107580Y	CN - 20072184266U - 15/10/2007	UNIV ZHEJIANG SCIENCE & TECH	G04C 19/00	The utility model provides an alarm clock which is convenient for ---hearing------impairment--- patients to use and can bring the good feeling of the whole day by waking up in gentle manner. The utility model comprises an alarm clock body and a timing vocalization circuit of speaker. The timing vocalization circuit of speaker is connected with a luminophor, and the luminophor is positioned at the surface of the alarm clock body or the alarm clock body is equipped with a light transmission port of the luminophor. By providing an illuminator to wake up people by optical signal, the utility model can facilitate ---hearing--- ---impairment--- patients to use, simultaneously wake up people in gentle manner and consequently bring the good feeling of the whole day.
NZ544835	AU - 20030904207 - 11/08/2003 ; WO - 2004AU01068 - 10/08/2004	VAST AUDIO PTY LTD	G10L 21/00 ; H04R 25/00	A method of enhancing sound heard by a ---hearing-------impaired--- listener is disclosed. The method comprises monitoring the sound in an environment in which the listener is located; and manipulating the frequency of high frequency components of the sound in a high frequency band, with little, if any, distortion to components of the sound in a speech frequency band, to enhance spectral cues to aid the listener in sound externalisation and spatialisation. Also disclosed is hearing-aid equipment for carrying out the method.
US2008273733	US - 20080170574 - 10/07/2008 ; US - 20060331842 - 13/01/2006 ; US - 20050124418 - 06/05/2005 ; US - 20040773731 - 05/02/2004 ; US - 20020325529 - 18/12/2002	VIVATONE HEARING SYSTEMS LLC	H04R 25/02	An exemplary hearing aid system includes a receiver unit configured and positioned within the user's ear canal so as to minimize insertion loss and/or occlusion effect.

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BRPI0407290	US - 20030445034P - 05/02/2003 ; WO - 2004US03449 - 05/02/2004	VIVATONE HEARING SYSTEMS LLC	H04R 25/00	Um sistema auxiliar de audição de exemplo inclui um receptor configurado de modo a criar uma perda de inserção em relação à faixa audível de audição abaixo de cerca de três decibéis, se comparado com um ouvido sem auxílio. Um sistema auxiliar de audição de exemplo também inclui um ou mais dentre: um microrreceptor posicionado em uma configuração de orelha aberta no canal auditivo de um usuário; uma porção de conexão intermediária que se estende entre uma unidade de processamento de som e um receptor; onde a porção de conexão intermediária inclui um fio de enrijecimento provido em pelo menos uma porção da porção de conexão intermediária e/ou dentro ou em pelo menos uma porção do receptor; um fio de retenção que se estende a partir de um dentre o fio de enrijecimento e o receptor, o fio de retenção configurado para se posicionar em uma porção da concha do ouvido; um componente de condução elétrica compreendendo dois fios em canais distintos ou isolados de outra forma um do outro na porção de conexão intermediária; e um alto-falante, pelo menos parcialmente envolvido em um invólucro que tem uma primeira e uma segunda porções de extremidade, a primeira porção de extremidade em comunicação com a conexão, o alto-falante em comunicação com uma janela provida na segunda porção de extremidade do alojamento, onde o invólucro é selado a fluidos e onde a janela é selada a fluidos por uma membrana ou por um material de malha. O auxiliar de audição descrito reduz os efeitos de inserção e oclusão em relação a dispositivos de comparação.
CN101258773	CN - 20058051470 - 01/09/2005	WIDEX AS	H04R 25/00 ; H03G 3/20	A method and hearing aid for processing sound signals for ---hearing--- ---impaired--- persons by providing multi-band compression processing is described. An input sound signal is filtered into a number of frequency bands to obtain band split signals. A signal level for each of the band split signals is determined and the frequency bands are arranged into a number of groups. Based on the signal levels in each of the groups, a compressor input level for a number of band split compressors each associated to one of the frequency bands is calculated. A compressor gain for each band split compressor is determined based on the corresponding compressor input signal and the band split signals are amplified with the corresponding compressor gain to produce an output sound signal.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
CN101263738	DK - 20050001454 - 17/10/2005	WIDEX AS	H04R 25/02	An interchangeable acoustic system (3) for a hearing aid. The acoustical system (3) is adapted for conducting sound from an output transducer in 5 the hearing aid housing of said hearing aid to an ear of a user. The inter-changeable acoustic system (3) comprises an encoding (8, 9) indicating acoustical properties of the interchangeable acoustic system (3).
CN101292570	WO - 2005EP55305 - 17/10/2005	WIDEX AS	H04R 25/00	A method and system for fitting the gain of a hearing aid for a ---hearing--- ---impaired--- person is described. For at least one frequency band a loop gain of the hearing aid in the ear canal of the ---hearing--- ---impaired--- person is measured, an effective vent parameter such as a corresponding vent diameter for the hearing aid by determining a vent parameter that generates the best fit between a modelled and the measured loop gain is estimated, a vent effect value based on the estimated effective vent parameter is determined, and a corrected hearing aid gain is provided by means of the determined vent effect value.
CN101310565	WO - 2005DK00666 - 17/10/2005	WIDEX AS	H04R 25/02	A combination of a hearing aid (1) and an adapter shoe (13), wherein the hearing aid has a pivotable battery compartment (6), and wherein the adapter shoe has engagement means (14, 15) for engaging the exterior of the hearing aid housing, blocking means (21) for blocking pivoting of the pivotable wall, and engagement means (23), for engaging the pivotable wall. The invention also provides an adapter shoe and a method of attaching an adapter shoe.
EP1997348	WO - 2006DK00159 - 21/03/2006	WIDEX AS	H04R 25/02	Interchangeable attachment means (4, 4') for attaching a conductor (7, 23) to a hearing aid having a hearing aid housing (1). The interchangeable attachment means (4, 4') is adapted to be located partially in said hearing aid housing wall (10, 18), so as to have a first part located in said hearing aid housing wall and a second part protruding through an aperture (11, 17) in said hearing aid housing wall (10, 18).

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JP2008211832	JP - 20080098841 - 07/04/2008	WIDEX AS	H04R 25/00 ; H04R 3/00 ; H04R 25/02	PROBLEM TO BE SOLVED: To protect a microphone from a wind. - SOLUTION: An ear-mounted hearing aid includes: a housing comprising a curved side surface including a convex side surface and a concave side surface; at least one first microphone for receiving ambient sound; a second microphone for receiving ambient sound; a processing means for processing signals from at least one of the first and the second microphones; and an output transducer. An aperture of the first microphone is formed on the convex side surface of the hearing aid housing. Furthermore, an aperture of the second microphone is formed on the concave side surface of the hearing aid housing so as to be protected from the effect of the wind when ordinarily using the hearing aid by means of the housing in cooperation with the head and the ear of a hearing aid user.
JP2008154296	EP - 20010610033 - 26/03/2001	WIDEX AS	H04R 25/02 ; H04R 25/00	PROBLEM TO BE SOLVED: To provide a hearing aid housing which is matched to the auditory canal of a user and is easily assembled. - SOLUTION: The hearing aid housing for a hearing aid to be inserted into the auditory canal includes a face plate and a shell that is matched to the shape of the auditory canal of a user. At an inner surface of the face plate, a face plate protrusion is provided and the shell comprises indentations that are adapted to receive and match the face plate protrusion. By putting the face plate protrusion into the indentations of the shell, the shell and the face plate are assembled, whereby correct assembly of the shell and the face plate is facilitated.
WO2008095505	WO - 2007DK50016 - 08/02/2007	WIDEX AS ; HANSEN CASPER HOJSTED	H04R 25/02	La présente invention concerne un composant (1) de récepteur dans l'oreille (RITE) pour prothèse auditive, ledit composant RITE comprenant un récepteur (9), un boîtier de récepteur (3) et un connecteur (4) comprenant des moyens de couplage (7) pour coupler le composant RITE à un composant de contour d'oreille (BTE) de ladite prothèse auditive, ledit connecteur (4) comprenant des moyens (6) conducteurs de l'électricité. Le composant RITE (1) comprend en outre un organe de montage (5) pour connecter le récepteur (9) dans le boîtier de récepteur (3) et le connecteur (4), ledit organe de montage (5) comprenant un élément de ressort (15) et au moins une borne de contact (16) apte à venir en contact de butée avec au moins une borne de contact correspondante (17) sur ledit récepteur (9).

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
CN201160920Y	CN - 20082044286U - 26/02/2008	XIJUN WANG	A61F 2/18 ; A61F 2/28	The utility model discloses a partial titanium auditory ossicle which is composed of a terminal disc, a podetium and a stapes articular fovea. The terminal disc and the stapes articular fovea are respectively arranged above and below the podetium; the wall of the stapes articular fovea is provided with a gap; the diameter of the terminal disc is 2-3 mm, and the thickness of the terminal disc is 0.05-0.2 mm, or the major diameter of the terminal disc is 2.5-3.5 mm, and the minor diameter of the terminal disc is 2-3 mm; the diameter of the podetium is 0.2-0.4 mm; the terminal disc and the podetium are in connection of 50-70 degrees; the connection of the ellipse terminal disc and the podetium presents an eccentric shape; the outer height and the outside diameter of the stapes articular fovea are both 1.0-1.5 mm; the inner height is 0.9-1.45 mm, the inside diameter is 0.9-1.4 mm, and the height and the width of the gap are 0.6-1.2 mm; the walls of the terminal disc and the stapes articular fovea are both provided with holes. The partial titanium auditory ossicle has the advantages that the requirements for different shapes and sizes of auditory ossicles of different crowds can be satisfied; the goodness of fit of the installation is high, the arthrosises are connected firmer, the audition is well improved, and the shape recover is better, etc.
CN201160921Y	CN - 20082044287U - 26/02/2008	XIJUN WANG	A61F 2/18 ; A61F 2/28	The utility model discloses a full titanium auditory ossicle which comprises a podetium and a terminal disc arranged above the podetium. The full titanium auditory ossicle is characterized in that the lower end of the podetium is connected with an inflated free end; the podetium and the terminal disc are in connection of 50-70 degrees; the diameter of the terminal disc is 2-3 mm, and the thickness of the terminal disc is 0.50-0.2 mm, or the major diameter of the terminal disc is 2.5-3.5 mm, and the minor diameter of the terminal disc is 2-3 mm; the length of the podetium is 3-9 mm, and the diameter of the podetium is 0.2-0.4 mm; the podetium and the terminal disc are in eccentric connection. The full titanium auditory ossicle has the advantages that the requirements for the artificial auditory ossicle of different height and the requirements for different operation methods can be satisfied; the contacting area of the artificial auditory ossicle and a stapes soleplate is increased; the intensity of compression born by the unit area of the stapes soleplate is decreased; the danger of puncturing the stapes soleplate is prevented; the audition is well improved, and the shape recover is better.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
JP2008177745	JP - 20070007960 - 17/01/2007	YAMAHA CORP	H04R 3/00 ; H04R 1/40	PROBLEM TO BE SOLVED: To provide a sound collection and radiation system that enables a ---deaf--- person to hear various life sounds without carrying a hearing aid. - SOLUTION: A notifying tone of a home electric appliance 101 that a sound collection and radiation device 1B picks up is transmitted to other sound collection and radiation devices. Each of the sound collection and radiation devices corrects the tone received from the sound collection and radiation device 1B according to auditory characteristics. It becomes harder for a person to hear a sound of high frequency than to hear a sound of intermediate or low frequency as he or she becomes older, so corrections for compensating for that are made. Consequently, the ---deaf--- person can hear life sounds generated in respective rooms without carrying any hearing aid.
CN201147200Y	CN - 20082043701U - 01/02/2008	YI LIU	A47J 27/212	The utility model discloses a kettle which is applicable for the partimute. The kettle is provided with a kettle nozzle and is characterized in that a dynamic prompting device driven by steam is arranged on the kettle, the dynamic prompting device corresponds to the kettle nozzle. Since the structure is adopted, the kettle has simple structure, can clearly prompt that the water is boiled, and is especially applicable for the partimute.
CN101229285	CN - 20081074255 - 02/02/2008	YUNNAI LI	A61K 36/85 ; A61K 36/899 ; A61P 27/16	The invention provides a hot stewed soup and a hot drink cream preparation for dietotherapy of gradual tinnitus and deafness; the invention consists of medicinal material foodstuff such as milk veteh, radix codonopsitis, atractylodes rhizome, liquorice, phellodendron, radix bupleuri, cimicifuga foetida, radix puerariae, viter rotundifolia, angelica, peony, dried orange peel, sweet potato starch, white lotus root starch, water caltrop starch, dioscoreaspp. starch and fried rice noodles. When used for the treatment of gradual tinnitus and deafness, the invention has the good effects and advantages of rich raw materials, easy prescription, easy taking, strong targeting power, strong guide power, good treatment effect, no side effect and the efficiency of 100 percent in clinical heteropathy, which fills the gap in a research subject of gradual tinnitus and deafness caused by the processed dietotherapy liquor soup-hot drink cream which has the defects of splenco-gastric weakness, insufficient middle-jiao energy, dull yang, degenerated clear qi and insufficient sources of qi blood sublimation.

Número de Documento	Prioridade(s)	Depositante	Classificação Internacional	Resumo
CN101241656	CN - 20081065810 - 11/03/2008	ZHONGWEI HUANG	G09B 21/06 ; G06F 17/00 ; G09B 5/04	The present invention discloses a computer aided training method for mouth-shape recognition ability which solves the technique problem of increasing training efficiency, saving time of teacher and parents. The method includes steps as follows: the user can select self-selection method or random method, when self-selection method is selected, the user watches pronouncing mouth-shape video and simulates pronouncing mouth-shape action and pronunciation; when random method is selected, computer plays pronouncing mouth-shape video, and interface displays letter, the user judges and computer gives correct answer. By comparison with present technique, the method can make computer replacing teacher or parents for training mouth-shape recognition ability by using computer multimedia function, so the method can save time of teacher or parents and has active action for increasing viability of ---deaf--- and dumb people and other ---hearing--- ---impaired--- people. The method is especially suitable for training mouth-shape recognition ability of ---hearing--- ---impaired--- people, such as ---deaf--- and dumb people, half-deafness people.
CN201111654Y	CN - 20072028121U - 19/09/2007	ZIQUAN GAO	G08B 7/06	The utility model relates to an electronic doorbell with a flash, which pertains to the field of electronic doorbell circuits. The technical proposal is that the electronic doorbell with a flash is composed of a sensor, a signal amplification circuit, a monostable circuit, a low-frequency oscillator circuit, a power supply circuit and an acoustic-optical prompting circuit by connection, wherein, a piezoelectric ceramic sheet THD is taken as a door knocking sensor; the signal amplification circuit is composed of resistors R1, R2, R3, R4 and R5, triodes T1 and T2 and a capacitor C1; the monostable circuit is composed of a resistor R6, capacitors C2 and C3 and an integrated circuit IC; the low-frequency oscillator circuit is composed of triodes T3 and T4, resistors R7 and R8 and a capacitor C4; the power supply circuit is composed of a capacitor C6, a diode D1 and a capacitor C5; a controllable silicon BCR, a light bulb L and a speaker are connected on the power supply circuit to constitute the acoustic-optical prompting circuit. The electronic doorbell with a flash has simple structure and convenient manufacture, which is particularly applicable to the families which often have the elderly with poor hearing or the ---deaf--- people at home for usage.

ANEXO I - Códigos dos Países

Código	País	Código	País
AR	Argentina	**IN**	Índia
AT	Áustria	**IS**	Islândia
AU	Austrália	**IT**	Itália
BE	Bélgica	**JP**	Japão
BG	Bulgária	**KR**	República Da Coréia
BR	Brasil	**LU**	Luxemburgo
BS	Bahamas	**LV**	Letônia
CA	Canadá	**MA**	Marrocos
CH	Suíça	**MD**	Republica Moldova
CN	China	**MX**	México
CZ	República Tcheca	**NL**	Holanda
DE	Alemanha	**NO**	Noruega
DK	Dinamarca	**NZ**	Nova Zelândia
DZ	Argélia	**OA**	African Intellectual Property Organization (OAPI)[1]
EA	Organização de Patentes da Eurásia (EAPO)[1]	**PH**	Filipinas
EE	Estônia	**PL**	Polônia
EG	Egito	**PT**	Portugal
EP	Organização Européia de Patentes (EPO)[1]	**RO**	Romênia
ES	Espanha	**RU**	Federação Russa
FI	Finlândia	**SE**	Suécia
FR	França	**SG**	Singapura
GB	Reino Unido	**SI**	Eslovênia
HK	Região Administrativa Especial de Hong Kong Da República Popular da China	**SK**	Eslováquia
HR	Croácia	**TR**	Turquia
HU	Hungria	**TW**	Taiwan
ID	Indonésia	**UA**	Ucrânia
IE	Irlanda	**US**	Estados Unidos
IL	Israel	**WO**	Organização Mundial de Propriedade Intelectual (WIPO)[2]
		ZA	África do Sul

Fonte: http://www.wipo.int/export/sites/www/scit/en/standards/pdf/03-03-01.pdf, acesso em março de 08.

[1] Organização intergovernamental (escritório de patente regional) que atua para alguns países contratante sob o PCT (Tratado de Cooperação de Patentes).

[2] O código "WO" é utilizado em relação à publicação internacional sob o Tratado de Cooperação em Matéria de Patentes – PCT de pedidos internacionais depositados em qualquer repartição receptora de pedidos PCT.