

john

Search history

- Search 1: FT=(HIGH~ AND VOLTAGE~ AND POWER~ AND CABLE~ AND INTERFACE~ AND INSULAT* AND LAYER~) (Results 16209)
- Search 2: FT=(terminal~ AND connect* AND interface~ AND cable~ AND conductive~ OR semiconductive~ AND layer) (Results 13400)
- Search 3: 1 AND 2 (Results 6707)
- Search 4: FT=(stress~ AND control~ AND tube~ AND CABLE~ AND tubular~ AND shrinkable~ AND sleeves~) (Results 1262)
- Search 5: 3 and 4 (Results 305)
- Search 6: FT=(geometric~ OR dielectric~ AND stress~ AND control~ AND element~) (Results 82717)
- Search 7: 5 and 6 (Results 262)
- Search 8: TAC=(HIGH~ AND VOLTAGE~ AND POWER~ AND CABLE~ AND INTERFACE~ AND INSULAT* AND LAYER~) (Results 194)
- Search 9: TAC=(terminal~ AND connect* AND interface~ AND cable~ AND conductive~ OR semiconductive~ AND layer) (Results 304)
- Search 10: TAC=(stress~ AND control~ AND tube~ AND CABLE~ AND tubular~ AND shrinkable~ AND sleeves~) (Results 19)
- Search 11: TAC=(geometric~ OR dielectric~ AND stress~ AND control~ AND element~) (Results 1371)
- Search 12: 8 and 9 and 10 and 11 (Results 1)
- Search 13: 8 and 9 and 10 (Results 1)
- Search 14: 8 and 9 (Results 67)

Title: Insulating structure for high voltage power cables

Abstract: Source: GB928057A 928,057. Cables; cable terminations. BRITISH INSULATED CALLENDER'S (SUBMARINE CABLES) Ltd. Dec. 5, 1961 [Dec. 6, 1960], No. 41975/60. Class 36. A gas-filled high-voltage power cable constructed without a gasproof metal sheath comprises at least one conductor having a flexible effective surface of a smooth non-re-entrant form on which is built a dielectric wall of helical lappings of **plastics** film which is surrounded by a layer or layers of helically applied metal tapes which may be separated from the dielectric by an electrically conductive screening tape. In the embodiment described (Fig. 1) the cable has a stranded core 1 on which is wound a flexible screen 2 of conductive polyethylene. The dielectric comprises layers 3 of polyethylene tapes applied with a 10 percent overlap and surrounding these layers is a seamless envelope 4 of polyethylene. An outer screen 5 is constructed from a helically applied conductive polyethylene tape. The cable is reinforced against the gas pressure by two layers of aluminium tape followed by two layers of aluminium alloy tape 6. A tape of bituminized cotton 7 and a seamless P.V.C. tube 8 protect the cable from corrosion. Numerous examples of the types of core which could be used and of suitable reinforcing tapes are given. The seamless envelope 4 may be applied by extrusion or formed by heating the outer tapes so that they combine. The outer tube 8 may be of rubber. The gas used may be nitrogen or sulphur hexafluoride and the gas space may be increased by sprinkling the dielectric tapes with powdered glass or mica or by roughening the tape surfaces. A sealing end for the cable (Fig. 2) comprises an inner insulator 13 enclosed in a shedded insulator 18, the inner insulator 13 being filled with liquid at the gas pressure. Gas is supplied to the insulator by a pipe 19 and if this is metal it is connected to a similar insulator 19. A gas reservoir may be included to take account of expansion due to heating of the cable.

Classifications:

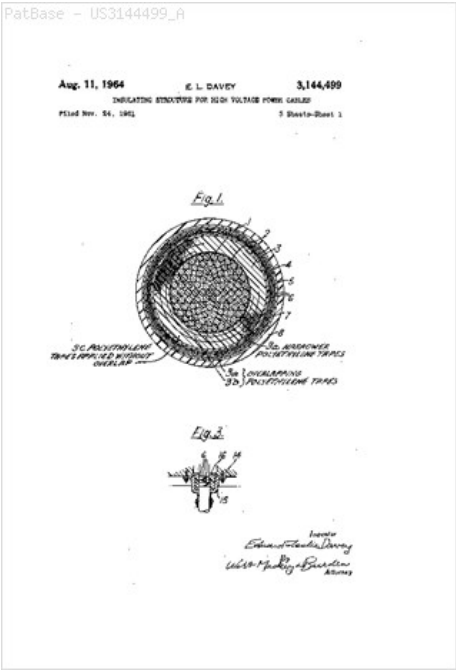
International (IPC 8-9): H01B9/06 H02G15/06 H02G15/22 (Advanced/Invention); H01B9/00 H02G15/00 H02G15/02 (Core/Invention)

International (IPC 1-7): H01B13/02 H01B9/06 H02G15/06 H02G15/22

CPC: H01B9/06 H02G15/06 H02G15/22

European: H01B9/06 H02G15/06 H02G15/22

US: 174/102R 174/108 174/14R 174/19 174/25G



Family:

Publication number	Publication date	Application number	Application date
FR1311500 A	19621207	FR19610881052	19611205
GB928057 A	19630606	GB19600041975	19601206
US3144499 A	19640811	US19610155252	19611124

Priority:

GB19600041975 19601206 FR19610881052 19611205

Probable Assignee: BRITISH INSULATED CALLENDERS

Assignee(s): (std): BRITISH INSULATED CALLENDERS

Assignee(s): BRITISH INSULATED CALLENDER S SUBMARINE CABLES L ; BRITISH INSULATED CALLENDER S SUBMARINE CABLES LIMITED

Inventor(s): (std): DAVEY EDWARD LESLIE ; LESLIE DAVEY EDWARD

Title: UNIVERSAL POWER CABLE JOINT WITH CLOSED-CELL SPONGE STRESS RELIEF ELEMENT

Abstract: Source: US3800064A A cable joining device of modular concept includes a tubular housing for receiving a prepared end of a power cable which has a region of high electrical stress, and a stress relief element for interposition between the housing and the cable. The stress relief element includes a compressible portion having electrically conductive properties and forming a stress control shield, a high dielectric strength portion contiguous to the shield portion, and a third portion that is compressible, has electrically conductive properties and is contiguous to the high dielectric strength portion. The interposition of the stress relief element causes it to be under radial compressive stress, which creates a continuous compliance of the element to the cable. The relation of the portions to one another is such that the high dielectric strength portion surrounds the region of high electrical stress of the cable. The tubular housing includes a provision for an accessible voltage test point.

Classifications:

International (IPC 8-9): H01B17/26 H01R11/00 H01R11/11 H01R4/70 H02G15/02 H02G15/06 H02G15/064 H02G15/068 H02G15/08 H02G15/103 (Advanced/Invention); H01R4/30 (Advanced/Non-invention); H01B17/26 H01R11/00 H01R11/11 H01R4/70 H02G15/02 H02G15/08 H02G15/10 (Core/Invention); H01R4/28 (Core/Non-invention)

International (IPC 1-7): H01B17/26 H01R11/00 H01R3/00 H01R4/30 H01R5/00 H01R7/08 H02G15/00 H02G15/02 H02G15/08 H02G15/10 H02G15/103 H02G15/18 H02G15/184

CPC: H01R4/30 H02G15/06 H02G15/064 H02G15/068 H02G15/103

European: H02G15/06 H02G15/064 H02G15/068 H02G15/103 T01R4/30

US: 174/11BH 174/142 174/71R 174/73.1

Family:

Publication number	Publication date	Application number	Application date
CA992172 A1	19760629	CA19730181888	19730925
DE2348895 A1	19740404	DE19732348895	19730928
DE2348895 C2	19830714	DE19732348895	19730928
FR2201565 A1	19740426	FR19730034768	19730928
FR2201565 B1	19770916	FR19730034768	19730928
GB1406341 A	19750917	GB19730045103	19730926
IT994350 A	19751020	IT19730052800	19730927
JP49071485 A2	19740710	JP19730108594	19730928
JP54007063 B4	19790403	JP19730108594	19730928
JP973994 C3	19791019	JP19730108594	19730928
SE396164 B	19770905	SE19730013167	19730927
SE396164 C	19771215	SE19730013167	19730927
SE430286 B	19831031	SE19760009571	19760830
SE430286 C	19840209	SE19760009571	19760830
SE7609571 A	19760830	SE19760009571	19760830
SE7609571 L	19760830	SE19760009571	19760830
US3800064 A	19740326	US19720292903	19720928

Priority:

US19720292903 19720928

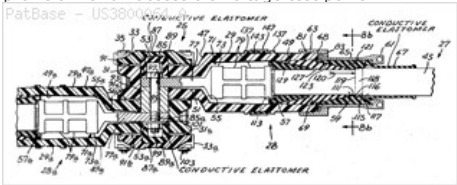
Probable Assignee: ELECTRIC G SPECIALTY CO

Assignee(s): (std): ELECTRIC G SPECIALTY CO ; ELECTRIC SPECIALTY CO ; ELECTRIC SPECIALTY CO G AND ; ELECTRIC SPECIALTY COMPANY G and ; G AND W ELECTRIC SPECIALTY CO ; HEBENBROCK KLAUS FRIEDRICH ; G ET W ELECTRIC SPECIALTY CY

Assignee(s): G ET W ELECTRIC SPECIALTY CY US ; G W ELECTRIC SPECIALTY CO ; G AND W ELECTRIC SPECIALTY CO BLUE ISLAND ILL US ; G AND W ELECTRIC SPECIALTY COMPANY ; LUSK GEORGE E ; G AND W ELECTRIC SPECIALTY CO ; ELECTRIC SPECIALTY COMPANY G AND W ; ELECTRIC SPECIALTY CO G AND W ; ELECTRIC G SPECIALTY CO US

Inventor(s): (std): LUSK GEORGE E ; LUSK GEORGE EDWARD ; LUSK G ; LUSK G E

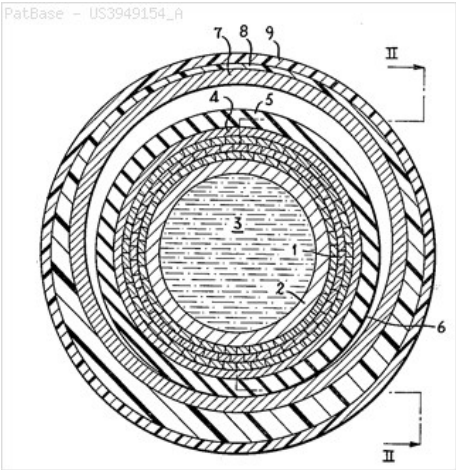
Inventor(s): LUSK G US ; EDWARD LUSK GEORGE ; LUSK GEORGE EDWARD DOWNERS GROVE ILL ; LUSK GEORGE EDWARD DOWNERS GROVE ILL US ; G E LUSK



Title: Internally cooled high-voltage high-energy cable

Abstract: Source: US3949154A A cable for transmitting high electric energies comprises an inner tubular member which is provided with a channel for conducting a cooling medium, an outer tubular member surrounding the inner tubular member, a cable jacket surrounding the outer tubular member with spacing, and an insulation provided intermediate the outer tubular member and the cable jacket. The inner and outer tubular members are circumferentially complete so that the cooling medium cannot escape into the insulation and cause damage thereto. The inner tubular member may itself serve as an electric conductor, or a separate electric conductor may be situated intermediate the inner and the outer tubular members.

Classifications:
International (IPC 8-9): H01B7/29 H01B7/42 H01B9/00 H01B9/06 H02G15/24 H02G15/28 (Advanced/Invention);
H01B7/17 H01B9/00 H02G15/00 (Core/Invention)
International (IPC 1-7): G01M3/02 H01B13/00 H01B7/34 H01B9/00 H01B9/06 H01R43/00 H01R43/02 H02G1/14 H02G15/18 H02G15/24 H02G3/06
CPC: H02G15/24 H01B9/0627 H02G15/28 H01B7/29 H01B9/00 Y10T29/49197 Y10T29/49812
European: H01B7/29 H01B9/00 H01B9/06F H02G15/24 H02G15/28
US: 174/106R 174/126.1 174/128.1 174/130 174/15.6 174/15C 174/21R 174/94R 228/179.1 228/187 29/424 29/628 29/870



Family:

Publication number	Publication date	Application number	Application date
DE2317013 A1	19741017	DE19732317013	19730405
DE2317013 B2	19750807	DE19732317013	19730405
DE2339102 A1	19750213	DE19732339102	19730802
DE2404719 A1	19750807	DE19742404719	19740201
DE2404720 A1	19750814	DE19742404720	19740201
DE2404720 B2	19791011	DE19742404720	19740201
DE2404720 C3	19831229	DE19742404720	19740201
DE2437279 A1	19760219	DE19742437279	19740802
DE2437279 B2	19760624	DE19742437279	19740802
DE2437279 C3	19830317	DE19742437279	19740802
DE2462231 A1	19760624	DE19742462231	19740802
DE2462231 B2	19770825	DE19742462231	19740802
DE2632808 A1	19780126	DE19762632808	19760721
DE2632808 B2	19790920	DE19762632808	19760721
DE2632808 C3	19800703	DE19762632808	19760721
FR2224842 A1	19741031	FR19730041165	19731119
FR2224842 B1	19770812	FR19730041165	19731119
FR2260172 A1	19750829	FR19750002636	19750128
FR2260172 B1	19790720	FR19750002636	19750128
FR2359529 A2	19780217	FR19770005136	19770222
GB1458127 A	19761208	GB19740005709	19740207
GB1496066 A	19771221	GB19750001560	19750114
GB1546010 A	19790516	GB19770022457	19770527
IT1043874 A	19800229	IT19740028366	19741011
IT995906 A	19751120	IT19730030175	19731016
JP50008081 A2	19750128	JP19740038750	19740405
JP50113788 A2	19750906	JP19750013309	19750131
JP53013193 A2	19780206	JP19770087866	19770721
US3949154 A	19760406	US19740457779	19740404
US3988526 A	19761026	US19740457778	19740404
US3989884 A	19761102	US19750545036	19750129
US4043031 A	19770823	US19750592253	19750701
US4166920 A	19790904	US19770817110	19770719

Priority:

DE19732317013 19730405 DE19732339102 19730802 DE19732372790 19740802
DE19742462231 19740802 DE19742404719 19740201 DE19742404720 19740201
GB19750001560 19750114 US19750592253 19750701 US19750545036 19750129
DE19762632808 19760721 DE19742437279 19740802

Probable Assignee: FELTEN AND GUILLEAUME CARLSWERK

Assignee(s): (std): FELTEN AND GUILLEAUME ENERGIETEC ; FELTEN AND GUILLEAUME KABELWERK ; FUERUTEN UNTO GIYOOMU KAABERUB ; FUERUTEN UNTO GIYOOMU KAABERUBUERUKE AG ; FELTEN GUILLEAUME KABELWERKE AG DT ; FELTEN UND GUILLEAUME KABELWERKE AG ; FELTEN ET GUILLEAUME KABELWERKE ; FELTEN ET GUILLEAUME KABELWERKE DT ; FELTEN UND GUILLEAUME KABELWERKE AG ORA FELTEN UND ; FELTEN ET GUILLEAUME CARLSWERK ; FELTEN AND GUILLEAUME CARLSWERK

Assignee(s): FELTEN AND GUILLEAUME CARLSWERK AG ; FELTEN AND GUILLEAUME CARLSWERK AG 5000 KOELN ; FELTEN UND GUILLEAUME KABELWERKE AG ORA FELTEN UND GUILL ; FELTEN GUILLEAUME CARLSWERK AG ; FELTEN GUILLEAUME KABELWERKE AG ; FELTEN AND GUILLEAUME KABELWERKE AG 5000 KOELN ; FELTEN AND GUILLEAUME ENERGIETECHNIK GMBH 5000 KOE ; FELTEN AND GUILLEAUME KABELWERKE AG ; FELTEN AND GUILLEAUME ENERGIETECHNIK GMBH 5000 KOELN DE ; FELTEN AND GUILLEAUME KABELWERKE 5000 KOELN AG

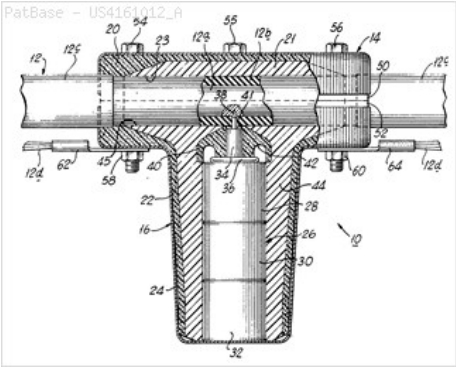
Inventor(s): (std): BRAKELMANN HEINRICH DR ING ; BUERUNAA RASUKUBUIN ; FRIESENHAGEN ENGELBERT ; FRIESHAFEN ENGELBERT ; HAINRITSUHI BURAAKERUMAN ; RASQUIN WERNER DR ING ; SUETTERLIN KLAUS H DR ; SUTTERLIN KLAUS ; YURUGEN FURIDORITSUHI ; BRAKELMANN HEINRICH ; RASQUIN WERNER PROF DR ING ; RASQUIN WERNER ; FRIEDRICH JURGEN ; FRIEDRICH JUERGEN DIPL ING

Inventor(s): RASQUIN WERNER PROFDR ING ; RASQUIN WERNER DR ING 5000 KOELN ; RASQUIN WERNER DR ING 5000 KOELN DE ; SUETTERLIN KLAUS H

Title: High voltage protection apparatus

Abstract: Source: US4161012A Arresters for protecting electrical equipment from damage or destruction due to overvoltage surges, for example overvoltage surges caused by lightning strokes, are provided that are fabricated or assembled integrally with cable taps, cable joints, separable insulated connector apparatus, and overhead arrester assemblies. Arresters are also provided for insertion in arrester receptacles which are integrally provided with cable taps, joints, separable insulated connector apparatus or cable receptacle devices. The arresters include a laminated enclosure for excluding the atmosphere, air and moisture, along the outer surfaces of arrester components and along the outer surface of an insulating housing layer, as well as along interfaces with insulated power cable and separable insulated arrester components. The housing is either fabricated by coating or molding onto the arrester components or by inserting the arrester components in an interference fit relationship into a premolded elastomeric enclosure.

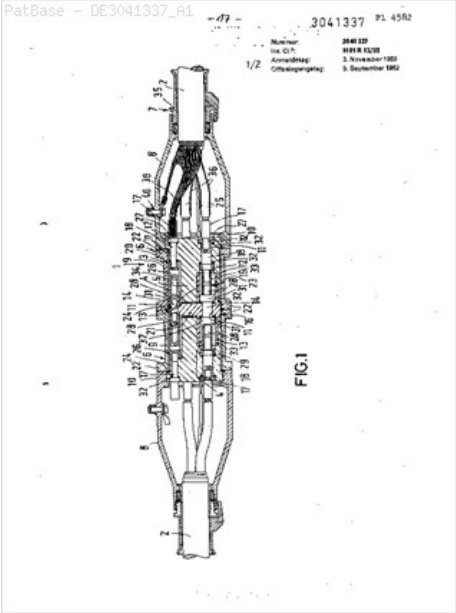
Classifications:
International (IPC 8-9): G01R1/36 H01C7/12 H01T4/08 (Advanced/Invention);
G01R1/00 H01C7/12 H01T4/00 (Core/Invention)
International (IPC 1-7): G01R1/36 H01T3/00 H01T5/00 H02H3/22
CPC: H01C7/12 H01T4/08
European: H01C7/12 H01T4/08
US: 174/71C 174/71R 361/127 361/128 439/181



Title: STECKVERBINDUNGS-KUPPLUNG FUER ELEKTRISCHE HOCHSPANNUNGSLEITUNGEN HV CABLE CONNECTOR FOR MINING EQUIPMENT - HAS IDENTICAL COMPONENTS FOR EACH CABLE END AND INTERFACING ADAPTOR

Abstract: Source: DE3041337A1 Ansprüche: C Steckverbindungs-Kupplung fuer elektrische Hochspannungs leitungen, insbesondere zur Stromversorgung beweglicher Verbraucher im Untertagebergbau, mit einem mittig teil baren und an jedem freien Ende zur dichten Einfuehrung eines leitungsendeseingerichteten Gehaeuse aus Metall und mit je einem die Steckverbindungseinrichtungen tragenden Koeper in jeder der zu einer dichten, gegebenenfalls mit einem Isolierstoff vergossenen Einheit zusammenschliessbaQ ren Gehaeusehaelften, d a d u r c h g e k e n n z e i c h n e t, dass a) das Gehaeuse (3) und die Steckverbindungseinrichtungen (4) sowie je ein zu deren Aufnahme ausgebildeter Isolierkoerper (5) jeder Kupplungshaelfte (6) sowie eines Adapter-Mittelstueckes (16) fuer den Zusammenbau der Kupplung (1) aus gleichartig gestaltet vorgefertig ten Elementen (8, 9, 14, 17, 18, 19, 26, 28) ausgebil det sind, b) das Gehaeuse (3) aus zusammengeflanschten Teilen (8, 9) besteht und c) je ein Steckerteil (18) jeder der aus paarweise gleich gestalteten Gliedern (17, 18, 19) zusammengesetzten Steckverbindungseinrichtungen (4) der hiermit zu kup pelnden Verbindungen (15, 0, 23) in dem betreffenden Isolierkoerper (5) beweglich gehalten it 2Kupplung nach Anspruch 1, d a d u r c h g e k e n n z e i c h n e t, dass das Gehaeuse (3) jeder Kupplungs haelfte (6) aus einem sich gegen die Leitungseinfuehrung (7) verjuengenden Einfuehrungsteil (8) und einem daran dicht festlegbaren Ringteil (9) mit Flanschen (22) zusammenge setzt ist, und dass saemtliche Gehaeuseteile mittels in stirnseitige Gewindebohrungen jedes der Einfuehrungsteile (8), bzw. The objective of the design is to employ a minimum number of different components in the mfr. and assembly of a high voltage trailing power cable connector. The connector housing comprises identical end and body sections for each cable end. The internal components are similarly identical. An insulation block is bored to hold connector pins into which terminals at the end of each cable core fit. Between the two end sections is an adaptor comprising an insulation disc holding connector elements which engage with the connector pins through ferrules. The adaptor is enclosed within the body housings. A similar contact pin arrangement is provided for pilot wires or an earth continuity conductor (38). The housing parts are normally bolted together.

Classifications:
International (IPC 8-9): H01R13/53 (Advanced/Invention);
H01R13/53 (Core/Invention)
International (IPC 1-7): H01R13/53
CPC: H01R13/53
European: H01R13/53



Family:

Publication number	Publication date	Application number	Application date
DE3041337 A1	19820909	DE19803041337	19801103
DE3041337 C2	19880908	DE19803041337	19801103

Priority:

DE19803041337 19801103

Probable Assignee: FELTEN AND GUILLEAUME ENERGIE

Assignee(s): (std): FELTEN AND GUILLEAUME ENERGIE ; FELTEN AND GUILLEAUME ENERGIETEC

Assignee(s): FELTEN AND GUILLEAUME ENERGIETECHNIK AG 5000 KOELN DE ; FELTEN AND GUILLEAUME ENERGIETECHNIK GMBH

Inventor(s): (std): ALBRECHT CHRISTHART ; SIEGERT WOLFGANG

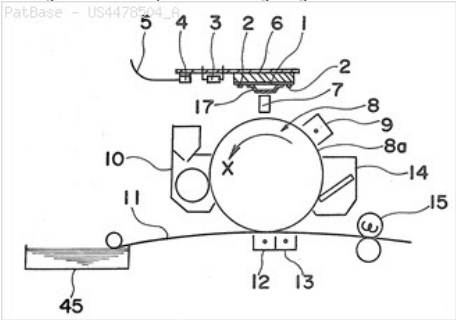
Inventor(s): SIEGERT WOLFGANG 5860 ISERLOHN DE ; ALBRECHT CHRISTHART 5000 KOELN DE

Title: ELECTROSTATIC RECORDING APPARATUS

Abstract: Source: US4478504A Disclosed herein is an electrostatic recording apparatus which comprises: a fluorescence generation tube having a plurality of small-sized light emission segments aligned on a substrate; an image-forming optical system for focusing light emitted from said light emission segments on the surface of a photosensitive member and forming an electrostatic image on said surface of the photosensitive member; and a plurality of driving circuits for controlling light emission of the light emission segments in response to image signals fed thereto.

Classifications:

International (IPC 8-9): B41J2/44 B41J2/447 B41J2/45 B41J2/455 G03B27/32 G03G15/04 G03G15/05 G03G15/32 G03G21/06 G06K15/12 G06K15/14 G09G3/12 H01L21/60 H01L23/52 H04N1/032 H04N1/04 H04N1/29 (Advanced/Invention); B41J2/44 B41J2/447 B41J2/45 B41J2/455 G03B27/32 G03G15/00 G03G15/04 G03G15/05 G03G21/06 G06K15/02 G06K15/12 H01L21/02 H01L23/52 H04N1/032 H04N1/29 (Core/Invention)
International (IPC 1-7): B41J3/18 G03B27/32 G03G15/00 G03G15/04 G03G21/00 G06K15/14 G09G3/12 H01L21/60 H01L23/52 H04N1/032 H04N1/29 H04N1/30
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European: B41J2/447 B41J2/447C G03G15/32L G06K15/12D4L
US: 347/112 347/129 347/132 355/1 355/69 355/8 358/300 358/302



Family:

Publication number	Publication date	Application number	Application date
JP1847063 C3	19940607	JP19810208806	19811222
JP3056033 B4	19910827	JP19810208806	19811222
JP58108864 A2	19830629	JP19810208806	19811222
JP58110268 A2	19830630	JP19810210355	19811225
JP58111981 A2	19830704	JP19810210356	19811225
JP58186783 A2	19831031	JP19820070818	19820426
JP58188149 A2	19831102	JP19820071706	19820427
US4478504 A	19841023	US19820451712	19821220

Priority:

JP19810208806 19811222 JP19810210356 19811225 JP19810210355 19811225
JP19820070818 19820426 JP19820071706 19820427

Probable Assignee: MINOLTA CAMERA KK

Assignee(s): (std): MINOLTA CAMERA KK

Assignee(s): MINOLTA CAMERA KABUSHIKI KAISHA

Inventor(s): (std): TANAKA ATSUYUKI ; TANAKA YOSHIYUKI

Title: Method and apparatus for spectral transmissibility examination and analysis

Abstract: Source: US4570638A Methodology and apparatus for the clinical evaluation of biological matter, in particular the human breast, in situ and in vivo, by spectral light transmissivity. An optical probe introduces selected light spectra into the examination subject at a first position and resulting light is detected at a second position located some distance from the infusion point; also, reception preferably occurs at another location, and the distances of these locations from the infusion point are determined. The light energy received at the distant points is quantified and conditioned by use of the determined distances from the infusion point and also by contrasting the data from the two differently-located reception points, such that the resulting data is compensated or normalized to characterize intrinsic internal tissue characteristics in an absolute sense, devoid of individual characteristics such as skin pigmentation, breast thickness, etc. The methodology further includes analytical or diagnostic treatment of the conditioned data by specific comparison of conditioned data taken from different regions of the same subject, of conditioned data taken from the same region on physiologically paired and/or different subjects, and also provides for meaningful accumulation of large-scale "background" or "average" values based upon identified and selected patient populations.

Classifications:

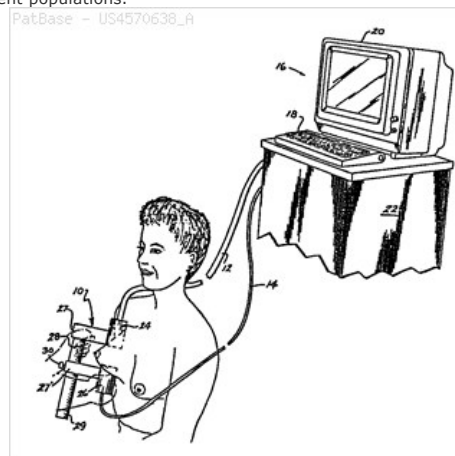
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International (IPC 1-7): A61B10/00 A61B3/00 A61B5/00 A61B5/14 A61B6/00 A61B6/08 G01N21/84 G01N33/48

CPC: A61B5/0091 A61B5/1455 A61B5/4312 A61B5/6814 A61B5/14552 A61B5/02433 A61B5/14553

European: A61B5/00P12F A61B5/024D4B A61B5/1455 A61B5/1455N2 A61B5/1455N4 A61B5/43F2 A61B5/68B2B K61B5/1455

US: 128/633 128/66.5 128/665 356/41 356/432 600/323 600/324 600/342 600/473 600/474 600/475 600/476 600/477



Family:

Publication number	Publication date	Application number	Application date
AT56132 E	19900915	AT19840307038T	19841015
CA1222566 A1	19870602	CA19840465480	19841015
CA1289380 A1	19910924	CA19870526948	19870108
CA2110716 AA	19931203	CA19922110716	19920604
CA2110716 C	20031028	CA19922110716	19920604
DE3483132 D1	19901011	DE19843483132	19841015
DK129484 A	19850415	DK19840001294	19840229
DK129484 A0	19840229	DK19840001294	19840229
DK63687 A	19870811	DK19870000636	19870209
DK63687 A0	19870209	DK19870000636	19870209
EP0140633 A2	19850508	EP19840307038	19841015
EP0140633 A3	19850612	EP19840307038	19841015
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Priority:

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Probable Assignee: SOMANETICS CORP

Assignee(s): (std): SOMANETEITSUKUSU CORP ; SOMANETICS CORP ; STODDART HUGH F

Assignee(s): SOMANETICS A CORP OF MICHIGAN CORP ; SOMANETICS A OF MI CORP ; SOMANETICS CORP TROY MICH US ; STEWART MELVILLE C ; SOMANETICS 1179 CHICAGO ROAD TROY MICHIGAN 48084 A ; SOMANETICS A CORP OF MI CORP ; LEWIS GARY D ; MESSING WAYNE P

Inventor(s): (std): GARY D LEWIS ; GEERII DEII RUISU ; GIYARII DEI RUISU ; GYARII DEI RUISU ; HIYUU EFU SUTODAADO ; HIYUU EFU SUTOTSUDAATO ; HUGH F STODDART ; MESSING WAYNE P ; STEWART II MELVILLE C ; STEWART MELVILLE C ; STEWART MELVILLE C II ; STODDART HUGH F ; STODDART HUGH FRANKLIN ; HYUU EFU SUTODAADO ; KLOSE PETER H ; LEWIS GARY D ; LEWIS GARY DEAN

Inventor(s): LEWIS GARY DEAN ST CLAIR SHORES MICHIGAN 48081 US ; STODDART HUGH FRANKLIN GROTON MASSACHUSETTS 01450 ; STODDART HUGH FRANKLIN GROTON MASSACHUSETTS 01450 US

Agent(s): BORDEN LADNER GERVAIS LLP

Designated states: AT BE CA CH DE DK ES FR GB GR IT JP KR LI LU MC NL SE

Title: Nuclear magnetic resonance radio frequency antenna

Abstract: Source: US4634980A A nuclear magnetic resonance radio frequency coil. The disclosed coil provides high frequency resonance signals for perturbing a magnetic field within the coil. The coil is impedance matched and tuned with adjustable capacitors. A balanced configuration is achieved with a co-axial cable chosen to phase shift an energization signal coupled to the coil. The preferred coil is a thin metallic foil having a shorting conductor, four wing conductors, and uniquely shaped parallel cross conductors connecting the shorting and wing conductors. When mounted to a rf transmissive plastic substrate and energized the coil produces a homogeneous field within a region of interest the size of a patient head. A semicircular balanced feedbar arrangement is used to minimize undesired field contributions.

Classifications:

International (IPC 8-9): A61B10/00 A61B5/055 G01N24/08 G01N33/00 G01R33/32 G01R33/34 G01R33/341 G01R33/343 G01R33/36 G01R33/44 G01R33/48 H01F6/06 H01F7/20 H01Q7/02 (Advanced/Invention);

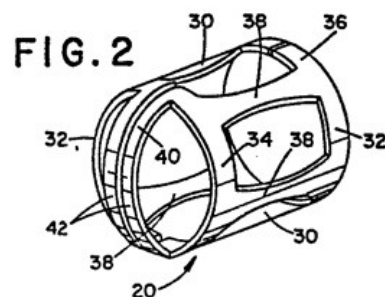
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International (IPC 1-7): A61B10/00 A61B5/05 A61B5/055 G01N24/04 G01N24/08 G01R33/20 G01R33/30 G01R33/32 G01R33/34 G01R33/341 G01R33/36 H01F5/08 H01F7/20 H01P5/12 H01Q7/02

CPC: G01R33/34046 G01R33/341 G01R33/36 G01R33/3628 G01R33/34007 G01R33/3657 G01R33/3635 G01R33/3621 G01R33/34069 G01R33/34084 G01R33/5659 G01R33/3678 G01R33/343

European: G01R33/341 G01R33/343 G01R33/34A G01R33/34F G01R33/34F3 G01R33/36 G01R33/36C G01R33/36G G01R33/36G2 G01R33/36Q S01R33/341 S01R33/34A S01R33/34G S01R33/36G S01R33/36G2 S01R33/36H2 S01R33/565R
US: 324/309 324/318 324/322 333/219 333/222 600/422 D24/158

PatBase - US4634980_A



Family:

Publication number	Publication date	Application number	Application date
CA1230922 A1	19871229	CA19850482454	19850527
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EP0233211 B1	19910306	EP19860904333	19860730
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US4634980 A	19870106	US19840641570	19840816
US4731584 A	19880315	US19860897046	19860814
US4740751 A	19880426	US19860894313	19860807
US4752738 A	19880621	US19860931726	19861117
US4793356 A	19881227	US19850765708	19850814
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US4879516 A	19891107	US19880199202	19880526
US4918388 A	19900417	US19880234278	19880819
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Priority:

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US19880234278	19880819	US19880252819	19881003	US19890392653	19890811
US19910651306	19910206				

Probable Assignee: PICKER INT INC

Assignee(s): (std): PICKER INTERNATIONAL INC ; PICKER INTERNATL INC ; PICKER INT INC

Assignee(s): PIKAA INTERN INC ; HOLLAND G NEIL ; LILLO AARNE ; MISIC GEORGE J ; PATRICK JOHN L ; PHILIPS MEDICAL SYSTEMS CLEVELAND INC ; PICKER INT ; PICKER INT INC A CORP OF OH ; PICKER INT INC A OHIO CORP ; PICKER INT INC A NY CORP ; PICKER INT INC A CORP OF NY ; PICKER INTERNATIONAL INC HIGHLAND HEIGHTS OHIO US ; PICKER INTERNATIONAL INC HIGHLAND HEIGHTS OHIO

Inventor(s): (std): HURST GREGORY C ; JII NIIRU HOORANDO ; JIII NEIRU HOORANDO ; JIYON ERU PATORITSUKU ; JIYOOJI JIEI MIISHICHI ; JIYOOJI JIEI MISHITSUKU ; JON ERU PATORITSUKU ; JOOJI JEI MIISHICHI ; LAMPMAN DAVID A ; LILLO AARNE ; MAADATSUDO MADEIZADE ; MEADATSUDO MEDEIZAARE ; MEEADATSUTO MEEDEITSUADE ; MEHDIZADEH MAHRDAD ; MEHDIZADEH MEHRDAD ; AANE RIRO ; AANE RIROU ; DEIBUITSUDO EI RANPUMAN ; HOLLAND G ; HOLLAND G NEIL ; MOLYNEAUX DAVID ; MOLYNEAUX DAVID A ; ORLANDO PAUL T ; HOLLAND NEIL G ; HURST C ; PATRICK JOHN L ; PATRICK JOHN L III ; POORU TEI OORANDOU ; PATRICK L ; PATRICK III JOHN L ; ORLANDO T LAKESHORE BLVD ; ORLANDO PAUL T LAKESHORE BLVD ; MISIC J ; MISIC GEORGE J

Inventor(s): PATRICK L III JOHN SOLON OH 44139 US ; HURST C GREGORY SHAKER HEIGHTS OH 44120 US ; ORLANDO PAUL T 27651 LAKESHORE BLVD ; ORLANDO T 27651 LAKESHORE BLVD PAUL EUCLID OH 4413 ; HOLLAND G NEIL CHAGRIN FALLS OH 44022 US ; HOLLAND G NEIL CHAGRIN FALLS OHIO 44022 US ; MEHDIZADEH MEHRDAD UNIVERSITY HEIGHTS OH 44118 ; MEHDIZADEH MEHRDAD UNIVERSITY HEIGHTS OH 44118 US ; MEHDIZADEH MEHRDAD UNIVERSITY HEIGHTS OHIO 44118 U ; MEHDIZADEH MEHRDAD UNIVERSITY HEIGHTS OHIO... ; MEHDIZADEH MEHRDAD WILMINGTON DELAWARE 19808 US ; MISIC J GEORGE HIRAM OH 44234 US ; LILLO AARNE NORTH ROYALTON OHIO 44133 US

Designated states: AT BE CH DE FR GB IT JP LU NL SE

Title: Time domain radio transmission system

Abstract: Source: US2002196176A A time domain communications system wherein a broadband of time-spaced signals, essentially monocycle-like signals, are derived from applying stepped-in-amplitude signals to a broadband antenna, in this case, a reverse bicone antenna. When received, the thus transmitted signals are multiplied by a D.C. replica of each transmitted signal, and thereafter, they are, successively, short time and long time integrated to achieve detection.

Classifications:

International (IPC 8-9): B65G47/52 G01S13/02 G01S13/04 G01S13/08 G01S13/18 G01S13/56 G01S13/58 G01S13/62 G01S15/04 G01S15/58 G01S7/282 G01S7/292 G01V3/12 H01Q21/06 H01Q9/28 H01Q9/40 H04B1/69 H04B1/717 H04B14/02 H04B14/04 H04B15/00 H04B7/00 H04B7/26 H04J3/00 H04K1/00 H04L25/49 H04L27/30 (Advanced/Invention);

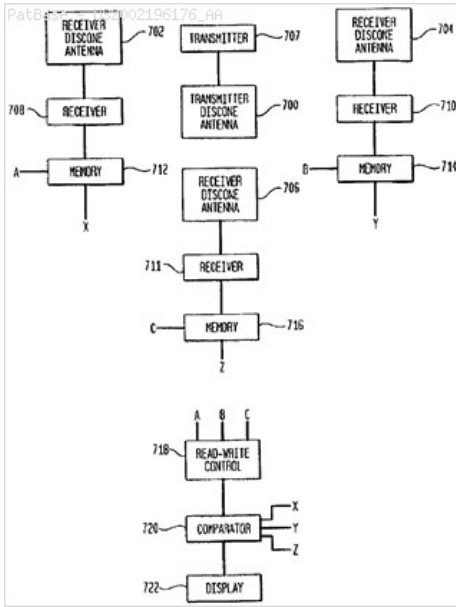
G01S13/02 H04B1/69 H04B1/7163 (Advanced/Non-invention); B65G47/52 G01S13/00 G01S7/28 G01S7/292 G01V3/12 H01Q21/06 H01Q9/04 H04B1/69 H04B14/02 H04B14/04 H04B15/00 H04B7/00 H04J3/00 H04K1/00 H04L25/49 H04L27/26 (Core/Invention)

International (IPC 1-7): A61K31/575 B65G47/52 G01S13/00 G01S13/02 G01S13/04 G01S13/08 G01S13/18 G01S13/56 G01S13/62 G01S13/88 G01S7/28 G01S7/282 G01V3/12 H01Q9/16 H01Q9/28 H03C3/02 H03K7/04 H04B1/69 H04B14/02 H04B15/00 H04B7/00 H04B7/24 H04B7/26 H04H1/00 H04K1/00 H04L25/02 H04L27/30 H04L29/00

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US: 342/1 342/104 342/105 342/114 342/114S 342/118 342/118P 342/125 342/125S 342/127 342/175 342/175S 342/179 342/179S 342/180 342/180S 342/195 342/19S 342/21 342/21P 342/21S 342/22 342/22P 342/27 342/27P 342/27S 342/28 342/28S 342/82 342/89 343/793 359/238 359/240 359/245 359/278 367/87 367/89 367/90 367/93 367/94 375/ E1.001 375/1 375/115 375/130 375/23 375/239 375/256 375/256S 375/259 375/343 375/345 375/367 375/37 375/96 375/E01.001 375/E1.001 375/E10.01 375/E10.01S 380/34



Family:

Publication number	Publication date	Application number	Application date
AT146884 E	19970115	AT19900912562T	19900302
AU198934162 A1	19901009	AU19890034162	19890310
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US2003016157 AA	20030123	US20020186306	20020628
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Priority:

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Probable Assignee: TIME DOMAIN CORP

Assignee(s): (std): BARNES MARK A ; LARRY W FULLERTON ; HALL PROCESSING SYSTEMS ; FULLERTON LARRY W ; FULLERTON L W ; FULLERTON LARRI V ; LARRI V FULLERTON US ; PHILLIPS CHARLES A ; TIME DOMAIN CORP ; TIME DOMAIN SYSTEMS INC

Assignee(s): VENTURE LENDING AND LEASING IV INC AND VENTURE LEN ; TDC ACQUISITION HOLDINGS INC ; VENTURE LENDING AND LEASING IV INC AND VENTURE LENDING AND LEASING V INC ; ALEREON INC ; PULSAR COMMUNICATIONS CORP ; PHILLIPS CHARLES A ROUTE ; RL FORTIN PC ; PULSON COMMUNICATIONS CORP ; TIME DOMAIN NETWORKS INC ; VENTURE LENDING AND LEASING IV INC ; FULLERTON LARRY W HUNTSVILLE ALA US ; GRABOWSKI RICHARD M ; LARRI VFULLERTON US ; FULLENTON LARRY W ; FULLERTON LARRY W SUITE ; BEIGHT TIMOTHY O ; ENHANCED CAPITAL TEXAS FUND II LLC ; ENHANCED CREDIT SUPPORTED LOAN FUND LP ; ENHANCED JOBS FOR TEXAS FUND LLC

Inventor(s): (std): BARNES MARK A ; BEIGHT TIMOTHY O ; FULLERTON LARRI V ; FULLERTON LARRY W ; GRABOWSKI RICHARD M ; LARRI V FULLERTON ; LARRI VFULLERTON ; LARRY W FULLERTON

Inventor(s): W FULLERTON LARRY ; LARRI V.FULLERTON[US] ; FULLERTON LARRY

Agent(s): MAXIMILIAN R PETERSON OKEEFE EGAN AND PETERMAN LLP; VENABLE LLP; OKEEFE EGAN AND PETERMAN LLP; KOBLER GEORGE P; ROBERT S

Designated states: AT AU BE CA CH DE DK ES FR GB IT JP KR LI LU NL SE SU US

Title: HEAT RECOVERABLE ARTICLE

Abstract: Source: US4990380A A tubular heat recoverable article comprises conductive polymeric material and is heated to effect recovery by the passage of electrical current therethrough. Elongate electrodes are attached on the surface or embedded in longitudinal flanges extending along the article. The flanges also comprise conductive polymeric material but are not heat recoverable, and therefore remain substantially undeformed on recovery other than bending to accommodate transitions. This means that the contact resistance between the electrode and the conductive material of the flange does not increase significantly on recovery.

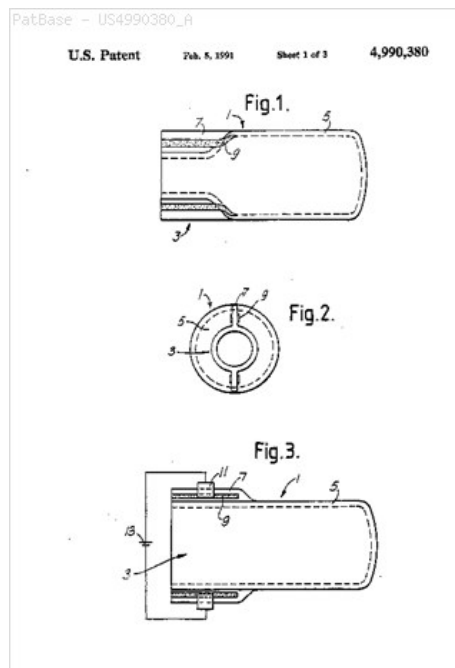
Classifications:

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US: 174/DIG.8 219/505 219/535 219/548 219/549 428/34.9 428/349 428/35.1

**Family:**

Publication number	Publication date	Application number	Application date
AT104589 E	19940515	AT19880308316T	19880908
AT107891 E	19940715	AT19880308304T	19880908
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AT97363 E	19931215	AT19880308307T	19880908
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Designated states: AT BE CH DE ES FR GB IT LI NL SE

Title: WAFER PROBE STATION HAVING ENVIRONMENT CONTROL ENCLOSURE

Abstract: Source: US2001001538A A wafer probe station is equipped with an integrated environment control enclosure substantially surrounding a supporting surface for holding a test device, such enclosure limiting fluid communication between the interior and exterior of the enclosure and preferably also providing EMI shielding and a dark environment. The limited communication between the interior and exterior of the enclosure is kept substantially constant despite positioning movement of either the supporting surface or probe holders. The positioning mechanisms for the supporting surface and probe holders each have portions located at least partially outside of the enclosure for transferring movement mechanically to the surface or holders, respectively.

Classifications:

International (IPC 8-9): A46D1/00 A61B5/00 A61B6/00 A61B8/00 A61B8/06 A61B8/14 A61M1/34 B60S3/06 C08G69/44 G01N29/02 G01N29/024 G01N29/22 G01N29/30 G01N9/24 G01R1/00 G01R1/04 G01R1/06 G01R1/067 G01R1/073 G01R19/00 G01R31/02 G01R31/06 G01R31/26 G01R31/28 G01R35/00 H01L21/66 H01L21/687 H01R11/18 H05K9/00 (Advanced/Invention); A61M1/36 (Advanced/Non-invention); A61B5/00 A61B6/00 A61B8/06 A61B8/14 A61M1/34 G01F G01N29/02 G01N29/22 G01N9/24 (Core/Invention); A61M1/36 (Core/Non-invention); G01F (Subclass/Invention)

International (IPC 1-7): A61B8/00 A61B8/06 A61B8/14 B60S3/06 C08G69/44 C08L77/00 C08L77/12 G01R1/00 G01R1/06 G01R1/073 G01R19/00 G01R31/02 G01R31/06 G01R31/26 G01R31/28 H01L21/00 H01L21/66 H01R11/18

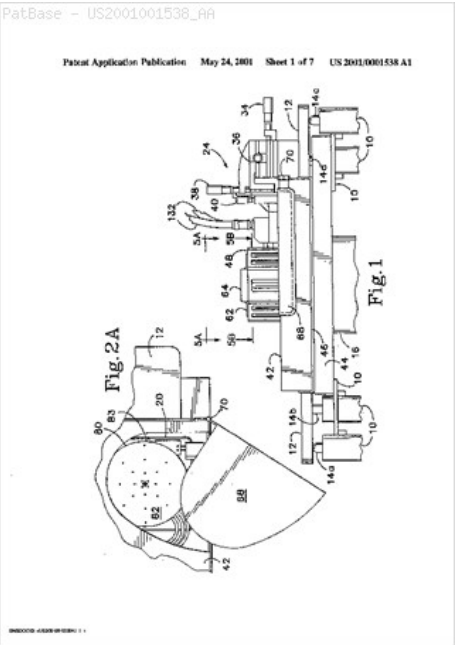
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US: 15/230.14 15/230.16 15/97.3 15/973 210/739 322/476 324/158.1 324/73.1 324/750.01 324/750.010P 324/750.02 324/750.14 324/750.140P 324/750.16 324/750.19 324/750.190P 324/750.190S 324/750.22 324/750.220P 324/750.24 324/750.25 324/750.26 324/750.260P 324/750.27 324/750.270P 324/750.270S 324/754 324/754.01 324/754.03 324/754.030P 324/754.030S 324/754.05 324/754.050P 324/754.050S 324/754.07 324/754.11 324/755.02 324/755.07 324/755.07P 324/755.070P 324/755.070S 324/756.01 324/756.02 324/756.020S 324/756.03 324/756.030S 324/756.04 324/756.040P 324/756.040S 324/756.05 324/757.03 324/758 324/760 324/761 324/762 324/762.05 324/762.050S 324/765 361/818 361/818S 525/425 525/432 525/434 528/288 600/322 600/368 600/437 600/438 600/439 600/468 73/1.82 73/18.2

Family:

Publication number	Publication date	Application number	Application date
AT444711 E	20091015	AT20030776476T	20031020
AU2003284296 AA	20040504	AU20030284296	20031020
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US5561377 A	19961001	US19950422439	19950414
US5604444 A	19970218	US19960641029	19960429
US5659255 A	19970819	US19960669097	19960626
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Priority:

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Probable Assignee: CASCADE MICROTECH INC

Assignee(s): (std): CASCADE MICROTECH INC ; GEN ELECTRIC ; CASECADE MICROTECH INC ; CASCASE MICROTECH INC ; GLOBAL MONITORS INC ; CASCADEMICROTECH INC ; LEE JEN SHIH LEE ; MIN MIKE ; LEE LIAN PIN ; BELANGER INC ; WANG SHYH HAU

Assignee(s): CARLTON DALE E ; CASCADE MICROECH INC ; BANK OF AMERICA OREGON ; SABIC INNOVATIVE PLASTICS IP BV ; KOXXY MARTIN J ; HARWOOD WARREN K ; GLEASON K REED ; CITIBANK NA ; CITIBANK NA COLLATERAL AGENT AS ; CASCADE MICROTECH INC BEAVERTON OREG US ; LEE LIAN PIN LEE JEN SHIH LEE WANG SHYH HAU MIN MI ; WARNER RICHARD H ; SMITH KENNETH R ; SCHWINDT RANDY J ; TERVO PAUL A ; SCHAPPACHER JERRY B ; SCHWINDT RANDY ; STRID ERIC W ; MIA MIKE ; LEE JEN SHIH ; KASUKEEDE MAIKUROTETSUKU INC ; CASCADE MICROTECH INC AN OREGON CORP ; GENERAL ELECTRIC CO

Inventor(s): (std): HARWOOD WARREN ; HARWOOD WARREN K ; JEN SHIH LEE LEE ; JIERII BII SHIYAPATSUCHIYAA ; KEI RIIDO GURIISON ; KENESU AARU SUMISU ; KOXXY MARTIN ; KOXXY MARTIN J ; LEE JEN SHIH ; LEE JEN SHIH LEE ; LEE LIAN PIN ; LIAN PIN LEE ; MIA MIKE ; MIKE MIN ; MIN MIKE ; PIITAA DEII ANDORIYUUSU ; POORU EI TAABO ; RANDEII JIEI SHIYUBINDO ; RANDY SCHWINDT ; RICHIIAADO ETSUCHI WAANAA ; CARLTON DALE E ; CLAGETT DONALD C ; CLAGETT DONALD CARL ; DEIRU II KAARUTON ; DONARUDO KAARU KURAGETSUTO ; ERITSUKU DABURIYUU SUTORAIIDO ; FOX DANIEL W ; ANDREWS PETER D ; GLEASON K R ; GLEASON K REED ; SCHAPPACHER JERRY B ; SCHWINDT RANDY ; SCHWINDT RANDY J ; SHYH HAU WANG ; SMITH KENNETH R ; STRID ERIC W ; TERVO ; TERVO PAUL A ; UOOREN KEI HAAUTSUDO ; WANG SHYH HAU ; WARNER RICHARD H ; WENTWORTH ROBERT J ; BELANGER MICHAEL J ; SHIERUDON JIEI SHIYAFUAA ; SHAFER SHELDON JAY ; SHAFER SHELDON J ; RUISU MAIKERU MARESUKA ; MARESCA LOUIS MICHAEL ; MARESCA LOUIS M ; FOX DANIEL WAYNE ; DANIERU UEIN FUOTSUKUSU

Inventor(s): WARNER RICHARD ; TERVO PAUL ; STRID ERIC ; SMITH KENNETH ; GLEASON K REED PORTLAND OREG ; CARLTON DALE ; GLEASON K ; SCHAPPACHER JERRY

Agent(s): BRUCE ALEXANDER RICHARD HENRY ; CHERNOFF VILHAUER MCCLUNG AND STENZEL ; CHERNOFF VILHAUER MCCLUNG AND STENZEL LLP, 1600 ODS TOWER; CHERNOFF VILHAUER MCCLUNG AND STENZEL LLP; JAGTIANI AND GUTTAG

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZM ZW

Title: METHOD AND SYSTEM FOR REMOTE DELIVERY OF RETAIL BANKING SERVICES

Abstract: Source: US2002038289A A practical system and method for the remote distribution of financial services (e.g., home banking and bill-paying) involves distributing portable terminals to a user base. The terminals include a multi-line display, keys "pointing to" lines on the display, and additional keys. Contact is established between the terminals and a central computer operated by a service provider, preferably over a dial-up telephone line and a packet data network. Information exchange between the central computer and the terminal solicits information from the terminal user related to requested financial services (e.g., for billpaying, the user provides payee selection and amount and his bank account PIN number). The central computer then transmits a message over a conventional ATM network debiting the user's bank account in real time, and may pay the specified payees the specified amount electronically or in other ways as appropriate. Payments and transfers may be scheduled in advance or on a periodic basis. Because the central computer interacts with the user's bank as a standard POS or ATM network node, no significant software changes are required at the banks' computers. The terminal interface is extremely user-friendly and incorporates some features of standard ATM user interfaces so as to reduce new user anxiety.

Classifications:
International (IPC 8-9): G06F17/60 G06Q20/00 G06Q20/04 G06Q20/08 G06Q20/10 G06Q20/16 G06Q20/18 G06Q30/02 G06Q40/00 H04M17/02 (Advanced/Invention); G06Q20/00 G06Q40/00 H04M17/00 (Core/Invention)
International (IPC 1-7): G06F15/30 G06F17/00 G06F17/60 G06K5/00 G07F7/10 H04M17/02
CPC: G06Q20/04 G06Q20/10 G06Q20/16 G06Q20/18 G06Q40/02 G07F19/211 H04M17/02 G06Q20/085 G06Q20/102 G06Q20/108 G06Q20/1085 G06Q20/042 G06Q30/0255 G06Q30/0273 G06Q40/00
European: G06F17/60D G06Q20/04 G06Q20/042 G06Q20/085 G06Q20/10 G06Q20/102 G06Q20/108 G06Q20/1085 G06Q20/16 G06Q20/18 G06Q30/0255 G06Q30/0273 G06Q40/00 G06Q40/02 G07F19/00B G07F19/211 H04M17/02
US: 235/379 235/380 364/408 379/90 379/93.18 380/29 705/14 705/14.53 705/14.69 705/26 705/35 705/39 705/39S 705/40 705/40P 705/42 705/42P 705/43 705/45 705/70 705/77 902/24

Family:

Publication number	Publication date	Application number	Application date
AT182412 E	19990815	AT19900901390T	19901210
AU199170387 A1	19910718	AU19910070387	19901210
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EP0504287 A1	19920923	EP19910901390	19901210
EP0504287 A4	19931222	EP19910901390	19901210
EP0504287 B1	19990721	EP19910901390	19901210
US2002038289 AA	20020328	US20010789534	20010222
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US5220501 A	19930615	US19890448170	19891208
US5870724 A	19990209	US19950469354	19950606
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Priority:
US19890448170 19891208 CA19902069955 19901210 EP19910901390 19901210
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Probable Assignee: OFFICIAL PAYMENTS CORP

Assignee(s): (std): ONLINE RESOURCES AND COMMUNICA ; ONLINE RESOURCES AND COMM CORP ; ONLINE RESOURCES AND COMMUNICATI ; ONLINE RESOURCES AND COMMUNICATIONS CORP ; ONLINE RESOURCES CORP ; ONLINE RESOURCES LTD

Assignee(s): SIRROM CAPITAL CORP ; ONLINE RESOURCES LTD A CORP OF DE ; WELLS FARGO BANK NATIONAL ASSOCIATION ADMINISTRATI ; WELLS FARGO BANK NATIONAL ASSOCIATION ADMINISTRATIVE AGENT AS ; LAWLOR MATTHEW P ; CARMODY TIMOTHY E ; ONLINE RESOURCES AND COMMUNICATIONS CORP MC LEAN ; OFFICIAL PAYMENTS CORP ; ONLINE RESOURCES AND COMMUNICATIONS INC ; OBSIDIAN LLC ; 21ST CENTURY COMMUNICATIONS FOREIGN PARTNERS LP ; 21ST CENTURY COMMUNICATIONS PARTNERS LP ; 21ST CENTURY COMMUNICATIONS T E PARTNERS LP ; APPLEWOOD ASSOCIATES LP ; BANK OF AMERICA NA ; BANK OF AMERICA NA ADMINISTRATIVE AGENT AS

Inventor(s): (std): CARMODY TIMOTHY ; CARMODY TIMOTHY E ; LAWLOR MATTHEW ; LAWLOR MATTHEW P ; MATTHEW P LAWLOR ; TIMOTHY E CARMODY

Agent(s): GOWLING LAFLEUR HENDERSON LLP; NIXON AND VANDERHYE PC

Designated states: AT AU BB BE BF BG BJ BR CA CF CG CH CM DE DK ES FI FR GA GB GR HU IT JP KP KR LI LK LU MC MG ML MR MW NL NO RO SD SE SN SU TD TG US

Title: Method and apparatus for handling electronic devices

Abstract: Source: US2001033179A A plurality of discrete electronic devices contained for transport in a carrier, such as a tube or a tray, are precisely positioned upside down for simultaneous probing at a test site by a probe array that is brought into aligned abutment with the upwardly projecting device leads in a preciser that includes at least one row defined by at least two spaced parallel dividers, and a plurality of spaced parallel ridges oriented perpendicular to the dividers. The electronic devices are formed of a dielectric material joined to a conductive layer which is in aligned abutment with at least one device through at least one via in the dielectric material.

Classifications:

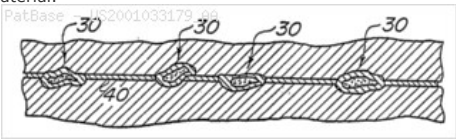
International (IPC 8-9): B23K20/16 B23K35/02 B32B5/16 G01R1/04 G01R31/02 G01R31/26 H01M8/04 H01R43/00 H05K1/11 H05K1/14 H05K3/32 (Advanced/Invention); G01R1/067 G01R31/28 H01H1/06 H05K3/40 (Advanced/Non-invention); B32B5/16 G01R1/02 G01R31/26 (Core/Invention); G01R1/067 G01R31/28 (Core/Non-invention)

International (IPC 1-7): B23K20/00 B23K20/16 B32B5/16 G01R1/06 G01R31/02 H01H1/02 H01M8/04 H01R23/68 H01R43/00 H05K1/11 H05K1/14

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European: B23K20/16 B23K35/02 G01R1/04S3D3 G01R31/28G6 G11C29/56D H01R23/72B H05K13/00H H05K3/32C S01R1/067C S01R31/28G2B2 S01R31/28G5 S11C29/5602 T01H1/06 T01L224/48091 T01L224/48227 T01L924/01004 T01L924/01014 T01L924/01078 T01L924/01079 T01L924/15320 T01L924/19041 T01L924/30107 T01L924/30110 T05K3/32C T05K3/32D T05K3/40B

US: 156/330 174/256 174/260 174/261 200/262 228/116 228/177 228/180.21 228/208 228/248 228/248.1 228/265 29/825 29/830 324/158.1 324/750.2 324/750.200P 324/754 324/754.03 324/754.030S 324/754.11 324/754.14 324/754.140P 324/754.18 324/754.180S 324/754.2 324/756.05 324/757 324/761 324/762.02 324/762.03 361/311 361/761 361/785 361/792 361/803 361/825 428/319.1 428/325 428/328 428/330 428/331 428/356 428/614 428/929 429/26 429/34 438/618 438/964 439/44 439/65 439/67 439/74 439/91



Family:

Publication number	Publication date	Application number	Application date
US2001033179 AA	20011025	US20010843019	20010425
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US5642055 A	19970624	US19950422445	19950412
US5670251 A	19970923	US19940320443	19941007
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WO9112108 A1	19910822	WO1991US01007	19910214

Priority:			
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		US19970843019	19970411

Probable Assignee: NANOPIERCE TECHNOLOGIES INC

Assignee(s): (std): DIFRANCESCO LOUIS ; NANOPIERCE TECHNOLOGIES INC ; PARTICLE INTERCONNECT INC ; PARTICLE INTERCONNECT CORP ; BAHL KENNETH S

Assignee(s): EXATRON AUTOMATED TEST EQUIPMENT INC A CORP OF CALIFORNIA ; STRYKER TECHNOLOGIES CORP ; STRYKER PUERTO RICO INC ; STRYKER SALES CORP ; AMP INC ; BANK OF AMERICA NATIONAL TRUST AND SAVINGS ASSOCIA ; BANK OF AMERICA NATIONAL TRUST AND SAVINGS ASSOCIATION ; CODEXI C O BANEXI VENTURES ; EXATRON AUTOMATED TEST EQUIPMENT INC ; MICROMODULE SYSTEMS INC ; STRYKER CORP ; STRYKER FAR EAST INC ; STRYKER INT ; HOWMEDICA OSTEONICS CORP ; PHYSIOTHERAPY ASSOCIATES INC ; STRYKER FOREIGN HOLDCO INC ; SMD CORP ; HOWMEDICAL LEIBINGER INC ; HAMBRECHT AND QUIST GUARANTY FINANCE LLP ; HAMBRECHT AND QUIST GUARANTY FINANCE LTD ; EXATRON AUTOMATED TEST EQUIPMENT INC A CORP OF CAL ; STRYKER INT INC

Inventor(s): (std): DIFRANCESCO LOUIS

Designated states: AT BE CA CH DE DK ES FR GB GR IT JP LU NL SE

Title: Functional neuromuscular stimulation system

Abstract: Source: US2001000187A An input command controller (A) provides logic function selection signals and proportional signals. The signals are generated by movement of a ball member (12) and socket member (14) relative to two orthogonal axes. When the joystick is implanted, a transmitter (50) transmits the signals to a patient carried unit (B). The patient carried unit includes an amplitude modulation algorithm such as a look-up table (124), a pulse width modulation algorithm (132), and an interpulse interval modulation algorithm (128). The algorithms derive corresponding stimulus pulse train parameters from the proportional signal which parameters are transmitted to an implanted unit (D). The implanted unit has a power supply (302) that is powered by the carrier frequency of the transmitted signal and stimulation pulse train parameter decoders (314, 316, 318). An output unit (320) assembles pulse trains with the decoded parameters for application to implanted electrodes (E). A laboratory system (C) is periodically connected with the patient carried unit to measure for changes in patient performance and response and reprogram the algorithm accordingly. The laboratory system also performs initial examination, set up, and other functions.

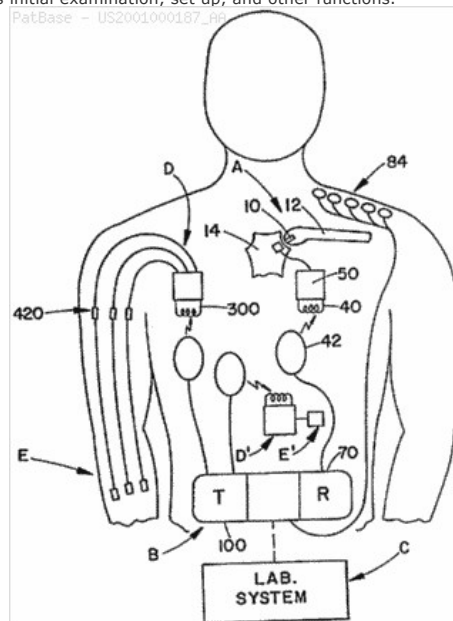
Classifications:

International (IPC 8-9): A61B18/18 A61N1/36 (Advanced/Invention); A61B18/18 (Core/Invention)

International (IPC 1-7): A61B18/18 A61F13/66 A61F2/02 A61N1/02 A61N1/08 A61N1/36 A61N1/372 A61N1/378

CPC: A61N1/36003 Y10S128/903 A61N1/3605 A61N1/0452 A61N1/0492
European: A61N1/36A

US: 128/421 128/846 128/888 128/903 600/561 607/116 607/148 607/48 607/49
607/59 607/60 607/61 607/62



Family:

Publication number	Publication date	Application number	Application date
US2001000187 AA	20010405	US20000726146	20001129
US5167229 A	19921201	US19860843159	19860324
US5769875 A	19980623	US19950485327	19950607
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Priority:

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Probable Assignee: UNIV CASE WESTERN RESERVE

Assignee(s): (std): UNIV CASE WESTERN RESERVE

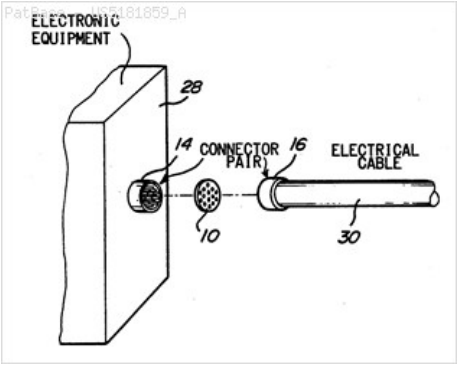
Assignee(s): BUCKETT JAMES ROBERT ; CASE WESTERN RESERVE UNIV ; CASE WESTERN RESERVE UNIVERSITY ; I NV ; INVACARE CORP ; LETECHUPIA JORGE ERNESTO ; MORGENTHAUER VENTURE PARTNERS IV LP ; PECKHAM PAUL HUNTER ; PRIMUS CAPITAL FUND III LTD ; PRIMUS CAPITAL FUND III PARTNERSHIP LTD ; SMITH BRIAN ; THROPE GEOFFREY BART

Inventor(s): (std): BUCKETT JAMES ROBERT ; LETECIPIA JORGE ERNESTO ; PECKHAM PAUL HUNTER ; SMITH BRIAN ; THROPE GEOFFREY BART ; THROPE GEOFFREY B ; PECKHAM PAUL H ; LETECIPIA JORGE E ; BUCKETT JAMES R

Title: ELECTRICAL CONNECTOR CIRCUIT WAFER

Abstract: Source: US5181859A A semiconductor wafer has a plurality of holes therein which correspond to pins of an electrical connector. The wafer includes circuitry thereon and contacts for making electrical connection to the pins. In such manner, the circuitry on the wafer can be used for a wide variety of purposes such as testing or modifying signals carried by the pins. The wafer can be installed in any common electrical connector pair without prior modification or preparation of the connectors and without impairing the normal fit or function of the mated connector pair.

Classifications:
International (IPC 8-9): B23Q1/00 G06F1/00 G06F21/00 G06F3/00 H01L23/32 H01L23/525 H01L31/12 H01R13/639 H01R13/66 H01R29/00 H01R33/74 H02H9/04 H02H9/06 H02J7/00 H05K1/02 (Advanced/Invention); H01R31/06 H01R9/03 H05K1/18 (Advanced/Non-invention); G06F21/00 (Core/Invention)
International (IPC 1-7): G01R15/00 G01R19/155 G01R21/06 G06F3/00 H01B1/08 H01C7/12 H01L23/32 H01L23/525 H01L31/12 H01R13/02 H01R13/66 H01R13/68 H01R13/703 H01R13/717 H01R23/66 H01R23/68 H01R29/00 H01R31/06 H01R33/74 H01R4/66 H01T4/06 H02H9/00 H02H9/04 H02H9/06
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US: 324/142 340/543 340/636.1 340/636.15 361/111 361/118 361/119 361/127 361/56 361/773 361/91 361/91.3 361/91.5 361/91.6 364/551.01 429/93 439/225 439/45 439/496 439/620 439/620.14 439/620.15 439/890 439/927 439/95 702/63



Family:

Publication number	Publication date	Application number	Application date
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US5181859 A	19930126	US19920895148	19920605
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US5387131 A	19950207	US19930054658	19930423
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Priority:

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Probable Assignee: NORTHROP GRUMMAN SYSTEMS CORP

Assignee(s): (std): TRW INC ; LOVETT KARIN J ; MILLER PAUL J ; FOREMAN KEVIN G ; KISER WILLIE C

Assignee(s): KISER WILLIE CHRISTOPHER ; FOREMAN KEVIN GALE ; NORTHROP GRUMMAN CORP ; NORTHROP GRUMMAN SPACE AND MISSION SYSTEMS CORP ; NORTHROP GRUMMAN SYSTEMS CORP ; TRW INC CLEVELAND OHIO US ; MILLER PAUL JAY ; TRW INC REDONDO BEACH CALIF ; TRW INC REDONDO BEACH

Inventor(s): (std): FOREMAN KEVIN G ; FOREMAN KEVIN GALE ; KEBUIN GEIRU FUAAMAN ; KISER WILLIE C ; KISER WILLIE CHRISTOPHER ; LOVETT KARIN J ; MILLER PAUL J ; MILLER PAUL JAY ; POORU JIEI MIRAA ; POORU JIYAI MIRAA ; RIEB SEAN MICHAEL ; SISKI STEVEN M ; UIIRI KURISUTOFUAA KISAA ; RIEB SEAN M ; JAY MILLER PAUL ; GALE FOREMAN KEVIN ; CHRISTOPHER KISER WILLIE ; SHIYOON MAIKERU RIIBU

Inventor(s): FOREMAN KEVIN GALE SANDIA PARK N MEX ; PAUL JAY MILLER ; MILLER PAUL JAY ALBUQUERQUE N MEX ; KISER WILLIE CHRISTOPHER RIO RANCHO N MEX ; KEVIN GALE FOREMAN ; WILLIE CHRISTOPHER KISER ; MILLER PAUL JAY ALBUQUERQUE NMEX ; MILLER PAUL JAY PLACITAS NM 87043 US ; KISER WILLIE CHRISTOPHER RIO RANCHO NMEX ; FOREMAN KEVIN GALE SANDIA PARK NM 87047 US ; FOREMAN KEVIN GALE SANDIA PARK NMEX

Designated states: DE FR GB

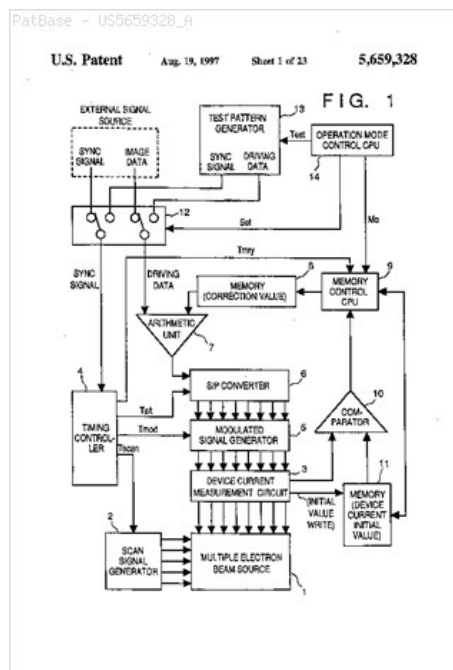
Abstract: Source: US5659328A An electron **beam** generating apparatus for an electron **beam** source having surface conduction electron emitting devices formed on a substrate; includes a measuring unit for measuring a device current flowing through each of the surface conduction electron emitting devices, a device current storage unit for storing data measured by the measuring unit. In addition comparing unit compares latest data measured by the measuring unit with the data stored in the device current storage unit, a correction value storage unit stores a correction value for correcting a driving signal to be applied to each surface conduction electron emitting device, and an adjusting unit adjusts the correction value stored in the correction value storage unit.

International (IPC 8-9): G09F9/313 G09G1/20 G09G3/20 G09G3/22 H01J1/30 H01J1/316 H01J29/52 H01J31/10 H01J31/12 H04N5/66 (Advanced/Invention); G09G3/20 H01J17/48 H01J31/12 (Advanced/Non-invention); G09F9/313 G09G1/20 G09G3/20 G09G3/22 H01J1/30 H01J31/12 H04N5/66 (Core/Invention); G09G3/20 H01J31/12 (Core/Non-invention)

International (IPC 1-7): G09F9/313 G09G1/20 G09G3/20 G09G3/22 H01J1/30
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CPC: G09G3/2011 G09G3/2014 G09G3/22 G09G3/2202 G09G3/2208 H01J2201/3165 H01J31/127
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T01J201/316B

US: 345/74 345/74.1 348/177



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AT177560 E	19990315	AT19940309560T	19941220
AU199481624 A1	19950713	AU19940081624	19941221
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Assignee(s): (std): CANON KK

Inventor(s): (std): SUZUKI HIDETOSHI ; SUZUKI HIDETOSHI C O CANON K K ; TODOKORO YASUYUKI ; TODOKORO YASUYUKI C O CANON K

Inventor(s): TODOKORO YASUYUKI C O CANON K K ; YASUYUKI TODOKORO ; HIDETOSHI SUZUKI

Designated states: AT BE CH DE DK ES FR GB GR IE IT LI LU NL PT SE

Title: PROGRAMMABLE POWER SUPPLY

Abstract: Source: US2003042881A A programmable power supply for providing a regulated DC output power is disclosed. The power supply provides the output power to any one of a plurality of electronic devices adapted for receiving the output power at an operational voltage or an operational current. The power supply receives a programming signal to maintain the output power at the operational voltage or operational current associated with a particular selected electronic device. Accordingly, by varying the programming signal, the power supply can be programmed to provide output power to any one of several electronic devices having differing input power requirements.

Classifications:

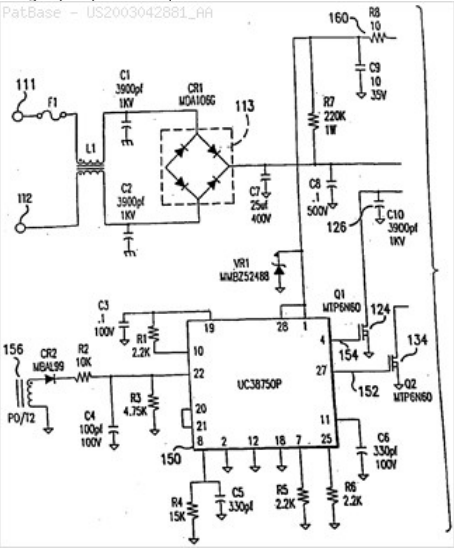
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US: 165/185 307/11 307/151 307/31 307/31P 307/38 307/38P 320/106 323/297 323/297P 336/200 336/200S 361/690 361/704 361/714 361/719 361/794 361/794P 363/141 363/144 363/144P 363/146 363/147 363/21 363/21.01 363/21.010P 363/21.03 363/21.05 363/21.07 363/21.08 363/21.09 363/79 363/80 363/80P 363/81 363/81S 363/97 439/131 439/131P 439/620



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Probable Assignee: COMARCO WIRELESS TECHNOLOGIES INC

Assignee(s): (std): COMARCO WIRELESS TECHNOLOGIES ; COMARCO WIRELESS TECHNOLOGIES INC

Assignee(s): SILICON VALLEY BANK ; ELKHORN PARTNERS PARTNERSHIP LTD ; LANNI THOMAS W ; COMARCO WIRELESS TECHNOLOGIES INC ; COMARCO WIRELESS TECHNOLOGIES INC ; BROADWOOD PARTNERS LP

Inventor(s): (std): LANNI THOMAS W ; LENNI THOMAS W

Inventor(s): LANNI THOMAS ; THOMAS W LANNI

Agent(s): OYEN WIGGS GREEN AND MUTALA LLP; HOLMES MATTHEW PETER; ROGER R WISE PILLSBURY WINTHROP LLP; PILLSBURY WINTHROP SHAW PITTMAN LLP; MARK R KENDRICK ESQ; MARK R KENDRICK ESP

Designated states: AE AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CR CU CY CZ DE DK DM EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

Title: HOST DEVICE EQUIPPED WITH MEANS FOR STARTING A PROCESS IN RESPONSE TO DETECTING INSERTION OF A STORAGE MEDIA

Abstract: Source: US2001018737A In accordance with this invention, a remote control for an interactive media can include a printed publication and/or a storage media and/or a data button. One embodiment of a remote control includes a printed publication (such as a book, magazine or a catalog) and one or more buttons physically attached to the printed publication to allow users to remotely control use of associated electronic content by a host device. Another embodiment of a remote control has a housing capable of removably holding a storage media encoded with electronic content associated with a button of the remote control. Yet another embodiment of a remote control has at least one data button which permits the user to select the data to be displayed by the host device. An autostart driver in the host device detects insertion of a storage media into a peripheral and automatically starts an application. The application interprets button codes transmitted by the remote control and displays the results or initiates other events. An application development system allows an author to quickly create interactive media applications.

Classifications:

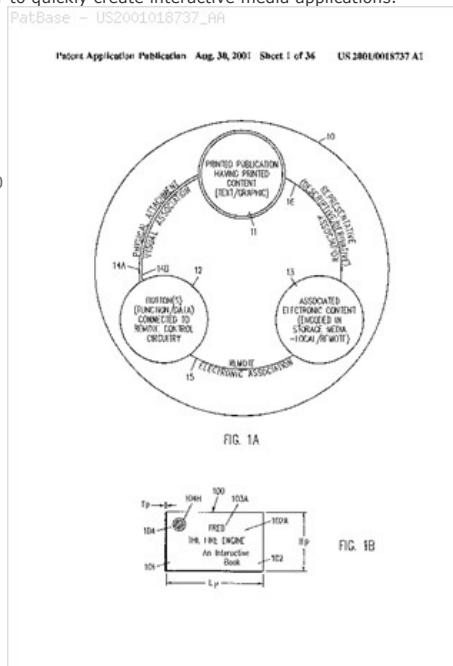
International (IPC 8-9): A63F13/06 B42D1/00 G06F13/00 G06F15/00 G06F17/30 G06F3/02 G06F3/048 G06F3/06 G06F9/24 G06F9/445 G08C17/00 G09B5/06 G11B19/02 G11B27/00 G11B27/10 G11B27/34 H04N1/00 H04N1/21 H04N5/445 H04N7/173 H04Q9/00 (Advanced/Invention); B42D1/00 G06F13/00 G06F17/30 G06F3/02 G06F3/048 G09B5/00 H04Q9/00 (Advanced/Non-invention)

International (IPC 1-7): A63F13/06 B42D1/00 G05B15/02 G05B19/18 G06F13/00 G06F15/00 G06F17/00 G06F17/30 G06F3/00 G06F3/02 G06F9/24 G06F9/445 G06G7/48 G08B9/00 G08C17/00 G08C19/12 G09B1/00 G09B19/00 G09B5/00 G09C1/00 G09G5/00 H04H1/00 H04L17/02 H04Q9/00

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JP2000510614 T2	20000815	JP19960503888T	19950630
KR19970704192 A	19970809	KR19960707635	19961230
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Probable Assignee: TV INTERACTIVE DATA CORP**Assignee(s):** (std): TV INTERACTIVE CORP ; TV INTERACTIVE DATA CORP**Assignee(s):** ZILLIONTV CORP ; ZILLION TV ; EVIDEACOM INC ; EVIDEACOM INC DBA SMARTPAPER NETWORKS CORP ; REDFORD PETER M ; SHOOT MOON II LLC ; SMARTPAPER NETWORKS CORP ; STERN DONALD S ; TRINIDAD ENTAINMENT SERVICES ; TRINIDAD ENTERTAINMENT SERVICES**Inventor(s):** (std): DONALD S STERN ; PETER M REDFORD ; REDFORD PETER M ; STERN DONALD ; STERN DONALD S**Agent(s):** FB RICE; SMART AND BIGGAR**Designated states:** AT AU BE CA CH CN DE DK ES FI FR GB GR IE IT JP KR LU MC NL PT SE

Title: Ink jet printing system

Abstract: Source: EP0705706A2 An inkjet print cartridge (10) comprises an ink reservoir (12); a substrate (28) with a plurality of ink firing chambers (130) and an ink firing element (70) in each chamber along a top surface thereof a first outer edge (86) along a periphery of substrate; and in close proximity to the ink firing chambers. The ink firing chambers are arranged in first and second arrays and are spaced so as to provide 600 dots per inch printing. An ink channel connects the reservoir with the ink firing chambers and includes a primary channel (52) connected to the reservoir and to a secondary channel. The primary channel allows ink to flow from the ink reservoir, around the first outer edge of the substrate to the secondary channel along the top surface of the substrate. A separate inlet passage (132) defined by a barrier layer (134) for each firing chamber connects the secondary channel with the firing chamber. The separate inlet passage has peninsulas (149) and pinch points (146) formed in the barrier layer to prevent cross-talk and overshoot during high frequency operation. A first circuit (78) on the substrate connects to the firing elements while a second circuit (36) on the cartridge connects to the first circuit means, for transmitting firing signals to the ink firing elements at a frequency greater than 9 kHz.

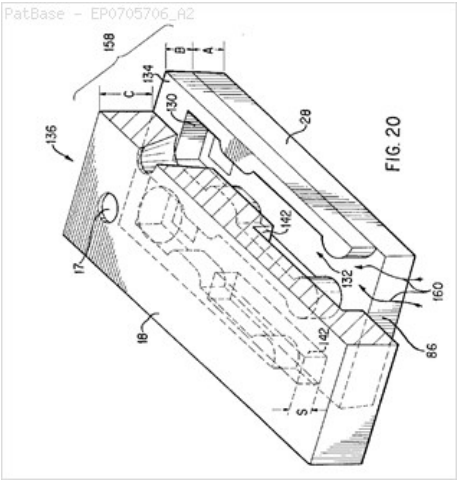
Classifications:

International (IPC 8-9): B41J2/05 B41J2/14 B41J2/16 B41J2/175 G01D15/18 (Advanced/Invention)

International (IPC 1-7): B41J2/05 B41J2/14 B41J2/175 G01D15/18

CPC: B41J2/04543 B41J2/04546 B41J2/0458 B41J2/14024 B41J2/1404 B41J2/14072 B41J2/14129 B41J2/14145 B41J2/14201 B41J2/1433 B41J2/1603 B41J2/1623 B41J2/1626 B41J2/1628 B41J2/1631 B41J2/1634 B41J2/1635 B41J2/1643 B41J2/175 B41J2/17509 B41J2/17513 B41J2/1752 B41J2/17523 B41J2/17526 B41J2/1753 B41J2/17553 B41J2/17556 B41J2002/14387 B41J202/13

European: B41J2/045D35 B41J2/045D37 B41J2/045D57 B41J2/14B1 B41J2/14B2G B41J2/14B3 B41J2/14B5R2 B41J2/14B6 B41J2/14D B41J2/14G B41J2/16B2 B41J2/16M1 B41J2/16M3 B41J2/16M3D B41J2/16M4 B41J2/16M5L B41J2/16M6 B41J2/16M8P B41J2/175 B41J2/175C B41J2/175C1A B41J2/175C2 B41J2/175C3 B41J2/175C3A B41J2/175C4 B41J2/175C4A B41J2/175C8 B41J2/175C9 L41J2/14N L41J202/13



Family:

Publication number	Publication date	Application number	Application date
DE69509996 D1	19990708	DE19956009996	19950912
DE69509996 T2	19991007	DE19956009996T	19950912
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EP0705706 A3	19970102	EP19950306361	19950912
EP0705706 B1	19990602	EP19950306361	19950912
JP3679166 B2	20050803	JP19950257949	19951004
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Priority:

US19940319893 19941006

Probable Assignee: HEWLETT PACKARD CO

Assignee(s): (std): HEWLETT PACKARD CO

Assignee(s): HEWLETT PACKARD CO PALO ALTO ; HEWLETT PACKARD CO PALO ALTO CALIF US ; HEWLETT PACKARD COMPANY

Inventor(s): (std): JIYURESU JII MORITSUTSU SAADO ; KEEFE BRIAN J ; KENIISU II TOURUUBA ; KENIISU JIEI KUURIAN ; KNIGHT WILLIAM R ; MEI FUON HO ; MORITZ JULES G ; STEINFELD STEVEN W ; SUTEIIBUN DABURIYU SUTAINFUIIR ; BURAIAN JIEI KIIFU ; CHAPMAN TERRI I ; CHILDERS WINTHROP D ; COURIAN KENNETH J ; EREN AARU D ; EREN AARU TATSUPON ; HO MAY FONG ; TAPPON ELLEN R ; TERI AI CHIYAPUMAN ; TRUEBA KENNETH E ; UINSUROTSUPU DEII CHIRUDAASU ; UIRIAMU AARU NAITO

Inventor(s): HO MAY FONG LA MESA CALIFORNIA 91941 US ; SUTEIIBUN DABURIYU SUTAINFUIIRUDO

Designated states: DE FR GB IT

Title: Liquid crystal display device with reduced frame portion surrounding display area

Abstract: Source: US5739887A A liquid crystal display device. The liquid crystal display device has a peripheral circuit including a liquid crystal display having drive ICs COG-packaged on a transparent substrate, and a foldable multi-layered flexible substrate having two or more conductor layers, so that the compact packaging can be realized to reduce EMI noise and the number of parts. The liquid crystal display device may also include a display controller having two or more display control integrated circuit elements packaged therein, and drive ICs mounted by a chip-on-glass packaging on two sides of a liquid crystal display panel, usually, on the longer sides, so that the display controller excellent in the temperature resistance and advantageous in compact and a video signal line driving circuit board are uniformly arranged at the upper and lower sides of a screen. As a result, the vertical positioning of the screen can be made proper to take an advantage in the compact packaging. Further, the liquid crystal display device may have a peripheral circuit board positioned in an outer periphery of a seal port recessed to avoid the projection of the seal port and in which a fluorescent tube has its two lamp cables arranged around four sides of a liquid crystal display element, so that the substrate at the seal port side and the lamp cable of a side light type back light can be compactly packaged.

Classifications:

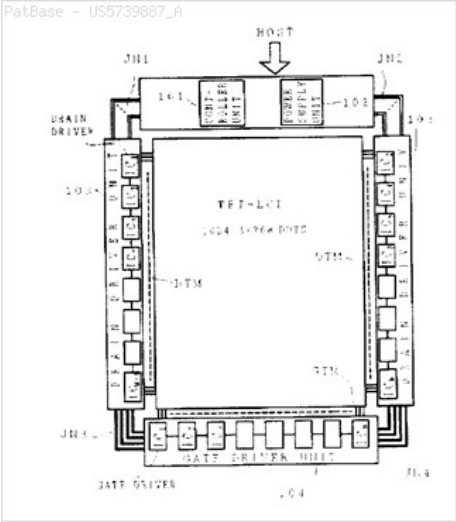
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International (IPC 1-7): G02F1/13 G02F1/133 G02F1/1333 G02F1/1335 G02F1/1337 G02F1/1345 G09F9/35 G09G3/36

CPC: H05K1/0298 H05K3/361 G02F1/133604 G02F1/13452 G02F2001/133612 H05K1/141 H05K3/323 H05K3/4691 H05K2201/056

European: G02F1/1336B2 G02F1/1345D H05K3/36B S02F1/1336B21 T05K1/02N2 T05K1/14B T05K201/05E T05K3/32B2 T05K3/36B T05K3/46G2

US: 349/149 349/151 349/152 349/58 349/65



Family:

Publication number	Publication date	Application number	Application date
CN1089905 C	20020828	CN19951019938	19951020
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KR100255144 B1	20000501	KR19950035732	19951017
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TW344043 B	19981101	TW19950109773	19950918
US5739887 A	19980414	US19950542962	19951013
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Priority:

JP19940256426 19941021 JP19940256427 19941021 US19970783090 19970114
US19950542962 19951013 JP19940256428 19941021

Probable Assignee: HITACHI DISPLAYS LTD

Assignee(s): (std): HITACHI DEVICE ENG ; HITACHI LTD

Assignee(s): DEVICE ENGINEERING CO LTD ; HITACHI SEISAKUSHO KK ; HITACHI DISPLAYS LTD ; IPS ALPHA SUPPORT CO LTD ; PANASONIC LIQUID CRYSTAL DISPLAY CO LTD ; HITACHI DEVICE ENG CO LTD ; HITACHI DEVICE ENGINEERING CO ; HITACHI DEVICE ENGINEERING CO LTD

Inventor(s): (std): IGARASHI YOICHI ; IKARA SHIYOSHI ; KOBAYASHI NAOTO ; KUMAOKA SHUNICHI ; KUMAOKA SUNGICHI ; MASUMI ; SASUGA ; SASUGA MASUMI ; SASUGA MASUMI ; SHIBATA KATSUHIKO ; UEDA SHIRO

Inventor(s): SHIRO UEDA ; SHUNICHI KUMAOKA ; UEDA FUMIRO ; MASUMI SASUGA ; KOBAYASHI NAOTO AND

Title: PHASOR TRANSDUCER APPARATUS AND SYSTEM FOR PROTECTION, CONTROL, AND MANAGEMENT OF ELECTRICITY DISTRIBUTION SYSTEMS

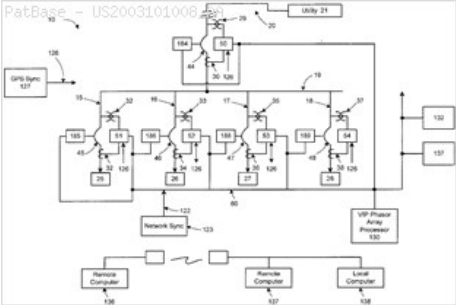
Abstract: Source: US2003101008A A phasor monitoring system and apparatus for use with a distribution system for electricity wherein periodic three phase electricity is distributed in a plurality of circuits. The phasor monitoring apparatus comprises a phasor transducer that has an input that receives analog signals representative of parameters of electricity in a circuit of the distribution system, an analog to digital converter that receives the analog signals and outputs a digital data signal representative of the analog signals, a processor coupled to the analog to digital converter to receive the digital data signal output from the analog to digital converter, programming on the processor that computes phasor data representative of the electricity in the circuit based on the digital data received from the analog to digital converter and provides a digital output representative of the phasor data, and a network-compatible port coupled to the processor to transmit the phasor data onto a data network coupled thereto. The phasor monitoring system comprises a data network interconnecting a plurality of phasor transducers each associated with one of the circuits of an electricity distribution system. A phasor array processor is connected to the data network and receives phasor data from a plurality of the phasor transducers connected to the network. The phasor array processor computes combined phasor data for the plurality based upon the phasor data received from the plurality of phasor transducers.

Classifications:

International (IPC 8-9): G01D4/00 G01R1/00 G01R11/00 G01R15/00 G01R15/18 G01R19/25 G01R21/00 G01R21/06 G01R21/133 G01R22/00 G01R22/06 G01R22/10 G01R31/08 G05B11/01 G05B19/418 G05D11/00 G05D17/00 G05D3/12 G05D9/00 G05F1/00 G06F1/26 G06F1/32 G06F11/00 G06F11/30 G06F12/14 G06F13/12 G06F17/00 G06F17/30 G06F17/40 G06F19/00 G06F21/00 G06F21/20 G06F3/00 G06F7/04 G06F9/44 G06Q20/00 G06Q50/00 G08B1/08 G08B13/00 G08B13/14 G08B21/00 G08B23/00 G08B29/00 G08C17/00 G08C17/02 G08C19/04 G08C19/16 H02H1/00 H02J11/00 H02J13/00 H04B1/38 H04B7/14 H04K1/00 H04L1/00 H04L1/08 H04L1/18 H04L12/12 H04L12/24 H04L12/26 H04L29/06 H04L29/08 H04L9/00 H04L9/30 H04L9/32 H04M1/00 H04M11/00 H04N7/16 H04Q7/00 H04Q7/24 H04Q9/00 H04W24/00 H04W28/04 H04W40/12 H04W40/24 H04W52/02 H04W52/04 H04W52/46 H04W84/00 H04W84/18 (Advanced/Invention); G01R11/24 G01R19/25 G01R21/133 H02J3/00 H04W28/04 H04W40/24 H04W52/02 H04W84/18 (Advanced/Non-invention); G01D4/00 G01R1/00 G01R15/00 G01R15/14 G01R19/25 G01R21/00 G01R22/00 G01R22/06 G01R31/08 G05B19/418 G05D11/00 G05D17/00 G06F1/26 G06F11/00 G06F11/30 G06F12/14 G06F17/30 G06F17/40 G06F19/00 G06F21/00 G06F3/00 G06F7/02 G06Q20/00 G08B1/00 G08B13/00 G08B13/14 G08B21/00 G08B23/00 G08B29/00 G08C17/00 G08C19/02 G08C19/16 H02H1/00 H02J13/00 H04B1/38 H04K1/00 H04L12/26 H04L29/06 H04L9/32 H04M1/00 H04M11/00 H04N7/16 H04Q7/00 H04Q7/24 H04Q9/00 H04W24/00 H04W28/02 H04W40/02 H04W40/24 H04W52/00 H04W84/18 (Core/Invention); G01R11/00 G01R21/00 H02J3/00 H04W28/02 H04W40/24 H04W84/18 (Core/Non-invention); G01D (Subclass/Invention) **International (IPC 1-7):** G01D4/00 G01M19/00 G01R1/00 G01R15/00 G01R21/00 G01R21/06 G01R21/133 G05B11/01 G05D17/00 G05D3/12 G05F1/00 G06F1/26 G06F12/14 G06F15/00 G06F19/00 G06F3/00 G06F9/44 G08B23/00 G08C17/02 G08F19/00 H03M1/06 H04L12/26 H04L9/00 H04Q9/00 **CPC:** Y02B90/245 Y02B90/246 Y04S20/40 Y04S20/42 G06F21/64 G01R15/185 G01R15/186 H04L63/029 H04L63/168 Y10S707/99931 H04Q2209/25 H04W52/0209 H04L63/08 H04L9/3247 H04L9/3268 H04L2209/56 H04L2209/68 H04L2209/80 G06F21/87 H04L63/0272 Y02B70/346 Y04S20/525 Y02B90/248 Y04S20/52 Y02B90/241 Y04S20/30 Y04S20/32 H02J13/0062 H02J13/0079 H02J13/0006 Y02E60/723 Y04S10/16 Y04S50/10 H04W40/12 H04B7/2606 H04L1/0061 H04L1/08 H04L1/1829 H04L2001/0092 H04L2001/0097 H04W24/00 H04W40/24 H04W52/04 H04W52/46 H04W84/18 G01D4/00 G01R22/066 G06F21/32 H02H3/006 H02H7/261 G06Q50/06 Y02E60/728 Y04S10/265 H04L12/10 G01D4/006 G01R22/10 Y02B90/243 Y04S20/325 Y02B90/242 Y04S20/322 H04L67/125 H04L67/02 G06F21/606 G06F1/28 G06F1/3209 G06F21/73 H04B3/544 H04B2203/5408 H04B2203/5445 H04L63/0428 H04L63/0442 H04L63/0823 Y04S40/24 H04L63/1441 Y02E60/74 Y02E60/7838 Y02E60/7869 Y04S10/30 Y04S10/40 Y04S40/124 Y04S40/128 H04L63/20 H02J13/001 H02J3/008 Y02B60/50 G05B19/4185 G05B2219/32142 H04Q9/00 G01D4/004 Y02B90/24 H02J13/00 G01R19/2513 G01R21/133 G01R22/00 H02H1/0061 H02J3/00 H04L1/203 Y10T307/461 Y02E60/724 Y04S10/18 G01R22/063 **European:** G01D4/00 G01D4/00R1 G01D4/00R2 G01D5/00 G01R15/18C2 G01R15/18D G01R19/25D G01R21/133 G01R22/00 G01R22/06D1 G01R22/06D3 G01R22/10 G05B19/418N G06F1/28 G06F1/32P1A G06F1/740 G06F21/32 G06F21/60C G06F21/64 G06F21/73 G06F21/87 G06Q50/06 H02H1/00E H02H7/26B H02J13/00 H04B3/54B H04B7/26B2 H04L1/00B7E H04L1/08 H04L1/18R H04L12/10 H04L29/08N1 H04L63/02C H04L63/04B2 H04L63/08 H04L63/08C H04L63/14D H04L63/14D10 H04L9/32 H04L9/32S H04Q9/00 H04W24/00 H04W40/12 H04W52/04 H04W52/46 S01R11/24 S01R19/25D S01R21/133 S01R22/06D1 S01R22/10 S05B219/32142 T02H3/00C T02J13/00F T02J3/00 T02J3/00T T04B203/54M2 T04B203/54P8 T04L1/00T T04L1/00T11 T04L63/04B T04L63/08 T04W28/04 T04W40/24 T04W52/02 T04W84/18 Y02B90/24B2 Y02B90/24B4 Y02B90/24D Y02B90/24F Y02E60/72F Y02E60/72H Y02E60/72N2 Y04S10/16 Y04S10/18 Y04S10/26B Y04S20/32B Y04S20/32D Y04S20/40 Y04S20/42 Y04S40/24 Y04S50/10 **US:** 307/38 324/113 324/118 324/119 324/126 324/126P 324/141 324/142 324/547 324/74 340/3.51 340/539.1 340/539.100S 340/541 340/568.1 340/635 340/637 340/664 340/664P 340/825.06 340/870.01 340/870.010P 340/870.02 340/870.020P 340/870.020S 340/870.03 340/870.21 340/870.39 364/483 364/488 364/489 364/578 370/241 370/252 370/254 370/254S 370/329 370/335 370/338 370/338P 380/258 395/200.1 395/200.11 395/201 395/601 395/701 455/127.1 455/575.1 455/90.03 455/90.3 700/22 700/286 700/286P 700/286S 700/291 700/291P 700/292 700/293 700/295 700/295P 700/295S 700/296 700/297 700/297 700/9 702/122 702/122P 702/124 702/124 702/178 702/182 702/185 702/187 702/188 702/57 702/57P 702/58 702/6 702/60 702/60P 702/61 702/61P 702/61S 702/62 702/62P 702/65 702/79 702/81 702/82 703/18 705/412 705/63 707/1 707/999.001 709/201 709/203 709/224 709/248 713/151 713/151P 713/186 713/186P 713/193 713/194 713/200 713/201 713/300 713/300P 713/340 713/400 717/123 726/17 726/18 726/2 726/26 726/30 726/34 726/4 726/4P 726/4S 726/6 726/6P

Family:

Publication number	Publication date	Application number	Application date
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EP1733243 A2	20061220	EP20050724482	20050304
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Priority:

US19940369849	19941230	CA19952148076	19950427	US19970810358	19970303
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US20030734387	20031212	WO2004US23006	20040716	WO2004CA00705	20040511
US20040554188P	20040318	CA20062540774	20060320	US20050274705	20051114

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Agent(s): SMART AND BIGGAR; GRUENECKER KINKELDEY STOCKMAIR AND SCHWANHAEUSSER ANWALTSSOZIETAET; FINNIE PETER JOHN; BRINKS HOFER GILSON AND LIONE PML; BRINKS HOFER GILSON AND LIONE/PML; BRINKS HOFER GILSON AND LIONE; BRINKS HOFER GILSON AND LIONE/PML, INDIANAPOLIS OFFICE; BRINKS HOFER GILSON AND LIONE PML INDIANAPOLIS OFFICE; WORKMAN NYDEGGER, (F/K/A WORKMAN NYDEGGER AND SEELEY); WORKMAN NYDEGGER F K A WORKMAN NYDEGGER AND SEELEY; KATZ JAMES L; WORKMAN NYDEGGER; BRINKS GILSON AND LIONE

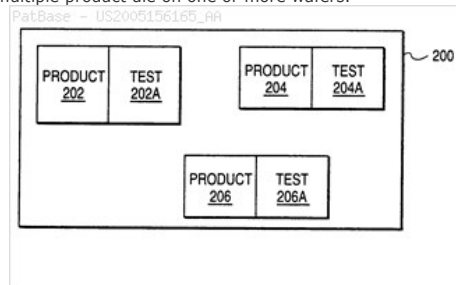
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Abstract: Source: US2005156165A One embodiment of the present invention concerns a test assembly for testing product circuitry of a product die. In one embodiment, the test assembly includes at test die and an interconnection substrate for electrically coupling the test die to a host controller that communicates with the test die. The test die may be designed according to a design methodology that includes the step of concurrently designing test circuitry and a product circuitry in a unified design. The test circuitry can be designed to provide a high degree of fault coverage for the corresponding product circuitry generally without regard to the amount of silicon area that will be required by the test circuitry. The design methodology then partitions the unified design into the test die and the product die. The test die includes the test circuitry and the product die includes the product circuitry. The product and test die may then be fabricated on separate semiconductor wafers. By partitioning the product circuitry and test circuitry into separate die, embedded test circuitry can be either eliminated or minimized on the product die. This will tend to decrease the size of the product die and decrease the cost of manufacturing the product die while maintaining a high degree of test coverage of the product circuits within the product die. The test die can be used to test multiple product die on one or more wafers.

International (IPC 8-9): B23K1/00 B23K20/00 B23K31/02 B23K9/067 B32B15/08 C23C18/16 C25D21/02 C25D5/08 C25D5/16 C25D5/22 C25D7/12 G01R1/00 G01R1/02 G01R1/04 G01R1/06 G01R1/067 G01R1/073 G01R3/00 G01R31/00 G01R31/02 G01R31/26 G01R31/28 G01R31/30 G01R31/316 G01R31/3183 H01L21/00 H01L21/44 H01L21/48 H01L21/56 H01L21/58 H01L21/60 H01L21/603 H01L21/607 H01L21/66 H01L21/68 H01L21/822 H01L23/02 H01L23/12 H01L23/32 H01L23/48 H01L23/485 H01L23/49 H01L23/498 H01L23/52 H01L23/538 H01L23/544 H01L23/66 H01L25/065 H01L25/07 H01L25/16 H01L25/18 H01L27/04 H01R12/00 H01R12/04 H01R12/16 H01R12/30 H01R12/32 H01R12/71 H01R13/05 H01R13/24 H01R27/00 H01R29/00 H01R31/06 H01R33/74 H01R33/76 H01R4/02 H01R4/48 H01R43/00 H01R43/16 H01R43/20 H01R9/00 H01R9/28 H05H1/18 H05K1/00 H05K1/18 H05K3/00 H05K3/24 H05K3/30 H05K3/32 H05K3/34 H05K3/40 H05K7/10 (Advanced/Invention); B23K9/067 C25D21/02 C25D5/08 C25D5/22 G01R1/067 G01R1/073 G01R3/00 H01H1/00 H01R107/00 H01R12/52 H05K1/14 H05K3/20 H05K3/34 H05K3/36 H05K3/40 (Advanced/Non-invention); B23K20/00 B23K31/02 B32B15/08 C23C18/16 C25D7/12 G01R1/02 G01R1/06 G01R1/067 G01R1/073 G01R3/00 G01R31/00 G01R31/26 G01R31/28 H01L21/00 H01L21/02 H01L21/66 H01L21/67 H01L21/70 H01L23/12 H01L23/32 H01L23/48 H01L23/544 H01L23/58 H01L25/065 H01L25/16 H01L27/04 H01L12/00 H01R13/04 H01R13/22 H01R29/00 H01R33/74 H01R33/76 H01R4/48 H01R43/20 H01R9/00 H01R9/22 H05K3/30 H05K3/32 H05K3/40 H05K7/10 (Core/Invention); C25D21/00 C25D5/00 G01R1/067 G01R3/00 H01H1/00 H05K1/14 H05K2/20 H05K3/34 H05K3/36 H05K3/40 (Core/Non-invention)

International (IPC 1-7): B23K20/00 B23K31/02 B23K9/067 G01R1/067 G01R1/073 G01R31/02 G01R31/316 H01L21/60 H01L21/66 H01L21/68 H01L23/12 H01L23/32 H01L23/48 H01L23/49 H01L23/498 H01L23/58 H01L29/10 H01R12/20 H01R29/00 H01R29/00 H01R9/00 H01R9/00 H05K3/30 H05K3/30

Diagram 200 illustrates a data structure with three tables. The top-left table contains two columns: 'PRODUCT' and 'TEST', with values '202' and '202A' respectively. The top-right table contains two columns: 'PRODUCT' and 'TEST', with values '204' and '204A' respectively. The bottom table contains two columns: 'PRODUCT' and 'TEST', with values '206' and '206A' respectively.



CPC: H01L2224/45144 H01L224/78 G01R1/07314 H01L224/12 H01L2224/786 H01L2224/851 H01L224/49 H01L2224/00014 H01L224/27 Y10S977/712 Y10S977/723 H01L2224/48644 H01L2224/48647 H01L2224/48644 H01L2224/48847 H01L2224/48624 H01L2224/48747 H01L2224/48639 H01L2224/48724 B2K31/0008 C23C18/165 G01R31/2856 G01R31/2863 H01L23/544 H01L24/03 H01L24/05 H01L24/83 H01L24/90 H01L24/94 H01L2223/54453 H01L2224/02311 H01L2224/03912 H01L2224/0558 H01L2224/05599 H01L2224/1132 H01L2224/1184 H01L2224/274 H01L2224/45572 H01L2224/45599 H01L2224/43851 H01L2224/90 H01L2924/05042 H01L2924/20104 H01L2924/20105 C23C18/161 H01L24/29 H01L2224/13111 H01L2224/32225 H01L2224/45139 H01L2224/4556 H01L2224/4809 H01L2224/4813 H01L2224/48465 H01L2224/73265 H01L2224/81205 H01L2924/0132 H01L2924/10253 H01L2924/20752 H01L2924/20756 H01L2924/20757 H01L2924/20758 H01L2924/20759 H01L2924/2076 C23C18/1605 H01L23/66 H01L2224/11003 H01L2224/1147 G01R1/06761 H01L2924/01327 H01L2924/1517 H01L2924/16152 H01L2924/19107 C23C18/31 C23C18/32 C23C18/38 H01L21/6715 H01L21/67248 H01L21/67253 H01L21/67288 H01L24/48 H01L2224/45015 H01L2224/48599 H01L2224/85205 H01L2924/01031 H01L2924/0106 H01L2924/01083 H01L2924/20751 H01L2924/20753 H01L2924/20754 H01L2924/20755 H01L21/67138 H01L2224/06153 H01L2224/13083 H01L2224/136 H01L2224/05639 H01L2224/05657 H01L2224/0566 H01L2224/85399 G01R1/0466 H01R1/0483 H01L2224/13639 H01L2224/13644 H01L2224/13647 H01L2224/13655 H01L2224/13657 H01L2224/45014 H01L2224/45124 H01L2224/45147 H01L2224/4554 H01L2224/456 H01L2924/01088 H01L2924/15312 H01L23/49827 H01L24/16 H01L2224/13124 H01L2224/13144 H01L2224/13147 H01L2224/16 H01L2224/45565 H01L2224/4569 H01L2924/01055 H01L2924/15153 H01L2924/15165 H01L2924/16195 H05K3/328 H05K201/0311 H05K2203/049 H01L24/45 H01L24/85 H01L2224/48091 H01L2224/48227 H01L2224/85043 H01L2924/01011 H01L2924/01018 H01L2924/01024 H01L2924/01025 H01L2924/01028 H01L2924/0103 H01L2924/30105 B2K31/0016 G01R1/07364 G01R1/07378 H01L21/76897 H01L2224/1134 H01L2224/49109 H01R12/52 H05K3/308 H05K3/3426 H05K7/1069 H05K2201/0397 H05K2201/068 H05K2201/10378 H05K2201/10719 H05K2201/10734 H05K2201/10909 H05K2201/10946 H01L2221/68304 H01L2221/68359 H01L2224/111 H01L2224/11826 H01L2224/13017 H01L2224/13018 H01L2224/13019 H01L2224/13565 H01L2224/13582 H01L2224/819 H01L2224/131 H01L2924/01012 H01L2924/01051 H01L2924/01075 H01L2924/10329 H01L2924/30107 H01L2924/0001 G01R1/07307 G01R1/07342 G01R1/07371 G01R31/2884 H01L23/49811 H01L24/06 H01L24/10 H01L2224/04042 H01L2224/05553 H01L2224/05624 H01L2224/05644 H01L2224/05647 H01L2224/06136 H01L2224/13099 H01L2924/01014 H01L2924/01023 H01L2924/01076 H01L2924/014 H01L2924/19041 H01L2924/19043 H05K3/20 H05K3/3421 H05K3/4015 B2K3200/004 B2K3201/40 C25D5/08 C25D5/22 C25D21/02 H01L21/4853 H01L21/4889 H01L21/563 H01L22/20 H01L24/11 H01L24/13 H01L24/81 H01L25/0652 H01L25/16 H01L2224/16145 H01L2224/73203 H01L2224/81801 H01L2224/85201 H01L2225/0651 H01L2225/06527 H01L2225/06555 H01L2225/06572 H01L2224/00013 H01L2924/01002 H01L2924/1532 H05K1/141 H05K3/326 H05K3/368 H05K2201/1031 H05K2201/10318 H05K2201/10757 H05K2201/10878 C25D7/12 H01L2224/78301 H01L2224/85045 H01L2924/01039 H01L2924/01004 H01L2924/01022 H01L2924/0105 H01L2924/01057 H01L2924/01322 G01R31/2889 H01H1/0036 H01L2224/0401 H01L2924/01037 H01L2924/01044 H01L2924/01077 H01L2924/09701 G01R31/2886 G01R31/287 G01R31/2874 H01L2224/85099 H01L22/32 H01L2924/12041 H01L2224/32145 G01R1/073 G01R1/07357 H01L2224/11334 H01L2924/0002 H01L2224/2929 H01L2224/293 H01L2924/00011 H01L2924/01006 H01L22/34 G01R30/00 B2K3201/38 G01R1/06727 G01R1/06744 H01L21/6835 H01L23/4951 H01L24/72 H01L2924/01005 H01L2924/01013 H01L2924/01015 H01L2924/01019 H01L2924/01027 H01L2924/01029 H01L2924/01033 H01L2924/01042 H01L2924/01045 H01L2924/01046 H01L2924/01047 H01L2924/01049 H01L2924/01074 H01L2924/01078 H01L2924/01079 H01L2924/01082 H01L2924/14 H01L2924/1433 H01L2924/3011 H01L2924/3025 H01R12/57 H05K3/4092 G01R1/06711 H01L2924/07802 Y10T29/49004 Y10T29/49117 Y10T29/4913 Y10T29/49144 Y10T29/49147 Y10T29/49149 Y10T29/49169 Y10T29/49171 Y10T29/49204 Y10T29/49208 Y10T29/4922 Y10T29/49812 Y10T29/49812/12396 Y10T428/12528 Y10T29/49155 Y10T29/49174 Y10T29/49213 Y10T29/49151 Y10T29/49179 Y10T29/49222 Y10T29/49224 Y10T29/49609 G01R1/06716 Y10T29/49126 Y10T29/49124 Y10T29/49162 Y10T29/49127 H01L2924/19103 H01L2224/13022 H01L2924/15151 H01L2924/351 H01L2924/15787 H01L2224/16225 H01L2924/181 G01R31/31851

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US: 156/232 174/260 174/267S 228/179.1 228/179.100S 228/180.5 228/180.500P 257/48 257/48P 257/734 257/734P 257/784 257/784P 257/E21.503 257/E21.503S 257/E21.507 257/E21.507S 257/E21.508 257/E21.508S 257/E21.509 257/E21.509S 257/E21.511 257/E21.511S 257/E21.512 257/E21.515 257/E21.515S 257/E21.519 257/E21.519S 257/E21.525 257/E21.525S 257/E23.01 257/E23.010S 257/E23.021 257/E23.021S 257/E23.024 257/E23.024S 257/E23.025 257/E23.025S 257/E23.039 257/E23.039S 257/E23.068 257/E23.068S 257/E23.078 257/E23.078S 257/E25.011 257/E25.011S 257/E25.029 257/E25.029S 29/593S 29/832S 29/842 29/842S 29/843 29/843S 29/846 29/854S

29/857S 29/860 29/874 29/876 29/876S 29/879 324/750.03 324/750.030P 324/750.05 324/750.050P 324/750.14 324/750.16 324/750.26 324/750.3 324/754 324/754.14 324/754.140P 324/755.01 324/755.010P 324/755.04 324/755.040P 324/755.05 324/755.050S 324/755.11 324/755.110S 324/756.03 324/756.030P 324/760 324/761 324/762 324/762.01 324/762.03 324/762.05 324/762.050S 324/763 324/765 361/773S 361/774S 438/14 438/617S 439/66P 439/71 439/71P 439/81 439/816 439/816P 439/83 439/886S 439/894 842/846 842/874

Family:

Publication number	Publication date	Application number	Application date
AU199659397 A1	19961211	AU19960059397	19960524
CN101017182 A	20070815	CN200610105697	19970515
CN1225724 A	19990811	CN19971096465	19970515
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CN1272632 C	20060830	CN19971096465	19970515
DE69530103 D1	20030430	DE19956030103	19951113
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DE69735101 T8	20070201	DE19976035101T	19970515
EP0837750 A1	19980429	EP19960916733	19960524
EP0837750 A4	19980610	EP19960916733	19960524
EP0837750 B1	20020828	EP19960916733	19960524
EP1659410 A2	20060524	EP20060000289	19970515
EP1659410 A3	20061108	EP20060000289	19970515
JP11508407 T2	19990721	JP19960535195T	19960524
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JP2007173846 A2	20070705	JP20060355406	20061228
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KR20050099553 A	20051013	KR20057017537	20050920
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TW348366 B	19981221	TW19960105624	19960513
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US19930152812	19931116	US19940340144	19941115	US19950455255	19950531
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US19970994799	19971219				

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Inventor(s): GARY W GRUBE ; BENJAMIN N ELDRIDGE ; I Y KHANDRES ; D V PEDERSEN ; THOMAS H DOZIER ; PEDERSEN DAVID ; WHITTEN RALPH ; SMITH WILLIAM ; SPORCK A ; MATHIEU GAETAN ; GRUBE GARY ; MATHIEU GA TAN ; I Y HANLOSE G L MASI ; I Y KHANDRES D V PEDERSEN ; KHANDROS IGOR ; GAETAN L MATHIEU ; DOZIER THOMAS ; ELDRIDGE BENJAMIN

Agent(s): FORMFACTOR INC LEGAL DEPARTMENT; N KENNETH BURRASTON KIRTON AND MCCONKIE; N KENNETH; BURRASTON N KENNETH; KIRTON AND MCCONKIE

Designated states: AL AM AT AU BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK EE ES FI FR GA GB GE GN GR HU IE IS IT JP KE KG KP KR KZ LI LK LR LS LT LU LV MC MD MG ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SN SZ TD TG TJ TM TT UA UG US UZ VN

Title: ENABLING/ENHANCING A FEATURE OF AN ELECTRONIC DEVICE USING RADIO FREQUENCY IDENTIFICATION TECHNOLOGY

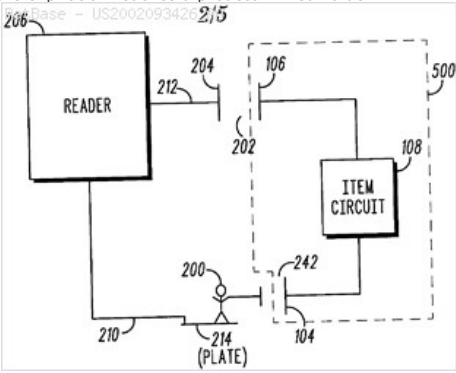
Abstract: Source: US2002093426A A radio frequency identification ("RFID") device (102) having stored thereon an expiration and a set of data bits which, when presented to a processing device (602) via a RFID reader (206), causes the processing device (602) to enable a feature that would otherwise be disabled in an electronic device (600), and disable the feature when the expiration reaches a predetermined value.

Classifications:

International (IPC 8-9): B23P19/00 B42D15/10 C09J5/00 G05B19/12 G06K19/06 G06K19/067 G06K19/07 G06K19/077 G06K7/00 G06K7/08 G06Q30/00 G06Q30/02 G07C1/10 G08B13/14 G08B13/181 G08B13/24 H01L21/56 H01L21/60 H01L23/498 H01L23/52 H01Q1/00 H01Q7/00 H02J17/00 H04B5/00 H04B5/02 H05K3/32 (Advanced/Invention); G06K19/067 G06K7/08 G08B13/18 H01Q1/00 H02J17/00 H05K3/30 (Advanced/Non-invention); B23P19/00 C09J5/00 G06K19/07 G06K19/077 G06K7/00 G06K7/08 G08B13/14 G08B13/24 H01L21/02 H01L23/48 H01L23/52 H05K3/32 (Core/Invention); H05K3/30 (Core/Non-invention) International (IPC 1-7): B23P19/00 B42D15/10 C09J5/00 G06K19/067 G06K19/07 G06K19/077 G06K7/08 G08B13/14 G08B13/181 G08B13/24 G08B21/00 H01L21/56 H01L23/52 H01Q7/00 H04B1/00 H04B5/00 H04B5/02 H04Q1/00 H04Q5/22 CPC: G06Q30/02 G06Q30/0209 G06Q30/0211 G06Q30/0224 G06Q30/0225 G06Q30/0226 G06Q30/0235 G06Q30/0236 G06Q30/0237 G06Q30/0238 G06Q30/0239 G06Q30/0242 G06Q30/0267 G06Q30/0269 G07C1/10 G06K7/10425 G06K7/10435 H04B5/0012 H04B5/0062 H04B5/0068 H04B5/02 G06K7/10336 H04B5/00 H04B5/0056 H04B5/0093 Y10S29/001 G06K19/027 G08B13/2414 G06K7/0008 G06K7/10069 G06K7/10326 G06K19/0701 G06K19/0723 G06K19/07788 G08B13/2417 G08B13/2431 G08B13/2437 H05K3/305 H05K3/325 H05K2201/10674 H05K2201/10977 H01L23/49855 G06K19/07749 G06K19/0775 G06K19/07786 H01L21/563 H01L24/28 H01L24/81 H01L2224/16225 H01L2224/73203 H01L2224/73204 H01L2224/81801 H01L2224/83102 H01L2224/92125 H01L2924/01004 H01L2924/01005 H01L2924/01006 H01L2924/01012 H01L2924/01013 H01L2924/0102 H01L2924/01025 H01L2924/01029 H01L2924/01032 H01L2924/01033 H01L2924/01044 H01L2924/0105 H01L2924/01056 H01L2924/01057 H01L2924/01078 H01L2924/01079 H01L2924/01082 H01L2924/01087 H01L2924/014 H01L2924/14 H01L2224/16227 H01L2924/07802 Y10T29/41 Y10T29/49002 Y10T29/49018 European: G06K19/02E G06K19/077T G06K19/077T2 G06K19/077T7E G06K19/077T7G G06K19/07A G06K7/00E G06K7/10A1C G06K7/10A8A G06K7/10A8C G06K7/10A9C1 G06K7/10A9C1A G06Q30/0209 G06Q30/0211 G06Q30/0224 G06Q30/0225 G06Q30/0226 G06Q30/0235 G06Q30/0236 G06Q30/0237 G06Q30/0238 G06Q30/0239 G06Q30/0242 G06Q30/0267 G06Q30/0269 G07C1/10 G08B13/24B1G G08B13/24B1G1 G08B13/24B3C G08B13/24B3M H01L21/56F H01L23/498K H01L24/28 H01L24/81 H04B5/00 H04B5/00C H04B5/02 H05K3/32C T01L224/16 T01L224/16225 T01L224/73203 T01L224/73204 T01L224/81801 T01L224/83102 T01L224/92125 T01L924/01005 T01L924/01013 T01L924/01078 T01L924/14000 T04B5/00C T04B5/00R T04B5/00R2 T04B5/00R4 T04B5/00W6 T05K201/10D1G T05K201/10D3C T05K3/30C2 US: 119/720 198/341.01 198/464.1 226/100 226/9 235/383 235/385 235/487 257/E21.503 257/E23.064 29/25.01 29/592.1 29/601 29/DIG.1 310/309 340/10.1 340/10.3 340/10.32 340/10.33 340/10.34 340/10.4 340/10.51 340/10.510S 340/13.26 340/5.61 340/5.8 340/531 340/539.1 340/568.1 340/572.1 340/572.4 340/572.5 340/572.6 340/572.7 340/572.700P 340/572.8 340/573.3 340/673 340/676 340/693.5 340/693.6 340/825.34 340/825.54 340/825.72 343/700MS 343/720 343/741 343/742 343/764 343/765 343/766 343/779 343/866 361/437 455/41 455/41.1 455/572 455/573 455/73 705/14 705/14.12 705/14.13 705/14.25 705/14.26 705/14.27 705/14.35 705/14.36 705/14.37 705/14.38 705/14.39 705/14.41 705/14.64 705/14.66

Family:

Publication number	Publication date	Application number	Application date
AR022195 AA	20020904	AR2000P100018	20000104
AU199670144 A1	19970430	AU19960070144	19960904
AU199927756 A1	19990915	AU19990027756	19990219
AU199962458 A1	20000403	AU19990062458	19990910
AU199962458 A5	20000403	AU19990062458	19990910
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AU200027200 A5	20000724	AU20000027200	20000105
AU200037190 A5	20000921	AU20000037190	20000302
AU2002367764 AA	20030922	AU20020367764	20021125
AU700340 B2	19981224	AU19960070144	19960904
BRPI9610948 A	19990112	BR1996PI10948	19960904
BRPI9809281 A	20000627	BR1998PI09281	19981218
BRPI9904896 A	20020102	BR1999PI04896	19990219
CA2234686 AA	19980409	CA19962234686	19960904
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CA2364448 AA	20010830	CA20002364448	20000302
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CN1101037 C	20030205	CN19961097551	19960904
CN1199482 A	19981118	CN19961097551	19960904
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EP0855064 A4	20010718	EP19960931470	19960904
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EP1329837 A3	20060308	EP20030006567	19960904
GB2340350 A1	20000216	GB19990025844	19981218
GB2340350 B2	20021218	GB19990025844	19981218
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IN208400 B	20070727	IN1999KN00065	19991022
JP11513518 T2	19991116	JP19970515032T	19960904
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NZ318619 A	19990629	NZ19960318619	19960904
RU98108292 A	20000610	RU19980108292	19980512
TW483269 B	20020411	TW20000100063	20000104
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Priority:

US19950540813	19951011	WO1996US14271	19960904	US19980045357	19980320
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Agent(s): TERRI S; THOMAS V

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SC SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW

Title: POWER SUPPLY METHODS AND CONFIGURATIONS

Abstract: Source: US2003085621A A power supply detects power requirements of an electrical device and configures itself to provide the correct power to the device. By using a connector that isolates the device from its battery, the power supply can provide power to the device, recharge the battery, recharge the battery while at the same time providing power to the device, or provide power to the device while preventing the battery from being recharged. A switch used with the connector creates various circuits and is controllable by the power supply, the electrical device, by signals from the electrical device, or by a third device. The power supply may provide power to a plurality of devices and may be used with other power supplies to form a power grid. A master control unit receives inputs from each of the power supplies and controls the delivery and supply of power being the power supplies.

Classifications:

International (IPC 8-9): G01K1/02 G01K1/14 G01K7/16 G01K7/22 G01R31/36 G01R31/40 G05D11/00 G05F1/565 G06F1/18 G06F1/26 H01C7/02 H01C7/04 H01M10/42 H01M10/48 H01R13/703 H01R24/58 H01R29/00 H01R9/05 H02J1/00 H02J7/00 H02J7/34 H02J9/06 (Advanced/Invention); C07D207/325 G01R31/40 H01M10/42 (Advanced/Non-invention); G01K1/00 G01K1/14 G01K7/16 G01R31/36 G05D11/00 G06F1/26 H01C7/02 H01C7/04 H01M10/42 H01R13/70 H01R29/00 H02J5/00 H02J7/00 H02J9/06 (Core/Invention); G01R31/40 (Core/Non-invention)

International (IPC 1-7): G01K1/00 G01K1/02 G01R1/00 G05F1/565 G06F1/18 H01C3/04 H01H47/00 H01M10/48 H01M10/50 H01R H01R13/703 H01R24/00 H01R27/00 H01R29/00 H01R9/05 H02J1/10 H02J7/00 H02J7/34 H02J9/00

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Family:

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AU199883746 A1	19990119	AU19980083746	19980626
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Probable Assignee: LIFESTYLE TECHNOLOGIES

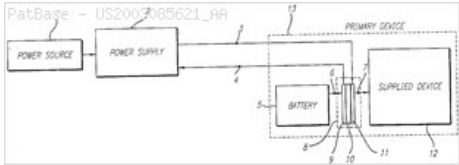
Assignee(s): (std): PATRICK H POTEGA ; PATRICK POTEGA ; POTEGA PATRICK ; POTEGA PATRICK HENRY ; POTEGA PATRICK H ; LIFESTYLE TECHNOLOGIES

Assignee(s): LIFESTYLE TECHNOLOGIES INC

Inventor(s): (std): PATRICK H POTEGA ; PATRICK POTEGA ; POTEGA PATRICK ; POTEGA PATRICK H ; POTEGA PATRICK HENRY

Agent(s): MARKS AND CLERK; PATRICK H POTEGA

Designated states: AE AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CR CU CY CZ DE DK DM EE ES FI FR GA GB GD GE

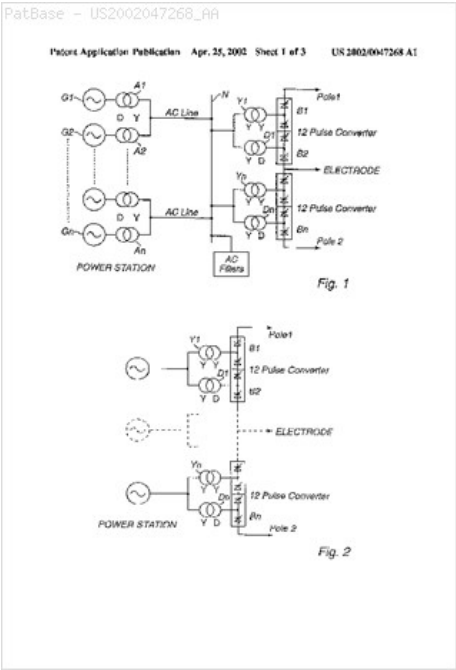


GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW
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Title: ROTATING ELECTRICAL MACHINE PLANTS

Abstract: Source: US2002047268A The present invention relates to installations for transformerless generation of HVDC and wherein the installation comprises rotating high-voltage single-winding/multiple-winding machines and converters. The single-winding/multiple-winding machine comprises a magnetic circuit with one or more magnetic cores and one or more windings, phase-shifted in space, which comprise a cable with one or more current-carrying conductors (2), each conductor comprising a number of strands, around each strand there being arranged an inner semiconducting layer (3), around which is arranged an insulating layer (4) of solid insulation, around which is arranged an outer semiconducting layer (5).

Classifications:
International (IPC 8-9): B60M3/00 H01B7/00 H01B7/02 H01B9/00 H01B9/02 H01F27/00 H01F27/28 H01F27/32 H01F27/34 H01F29/02 H01F29/14 H01F3/10 H01F3/14 H01F30/00 H01F38/04 H02H3/02 H02H3/08 H02H7/04 H02H9/02 H02H9/04 H02H9/06 H02J3/01 H02J3/10 H02J3/36 H02K1/06 H02K11/04 H02K15/00 H02K15/08 H02K15/085 H02K15/10 H02K15/12 H02K3/04 H02K3/12 H02K3/14 H02K3/28 H02K3/32 H02K3/34 H02K3/40 H02K3/48 H02K47/18 H02K9/19 H02M3/00 H02M3/24 H02M7/04 (Advanced/Invention); H01F27/00 H01F27/34 H02J3/36 H02K1/16 H02K3/40 H02K9/19 H02M7/04 (Advanced/Non-invention); H01F27/00 H01F27/28 H01F27/32 H01F27/34 H01F29/00 H01F3/00 H02H3/02 H02J3/01 H02J3/10 H02J3/36 H02K15/00 H02K15/12 H02K3/04 H02K3/12 H02K3/28 H02K3/32 H02K3/48 H02K47/00 H02M7/04 (Core/Invention); H02K9/19 (Core/Non-invention); H02K (Subclass/Invention)
International (IPC 1-7): B60M3/00 B62B3/00 F03B13/10 H01B7/30 H01B9/00 H01B9/02 H01F27/00 H01F27/24 H01F27/32 H01F27/34 H02J3/36 H02K1/00 H02K1/06 H02K15/00 H02K15/04 H02K15/12 H02K16/04 H02K17/00 H02K19/00 H02K3/12 H02K3/40 H02M3/00 H02M3/24 H02M3/335 H02M7/04 H02P9/04
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Family:

Publication number	Publication date	Application number	Application date
AP1083 A	20020723	AP19980001404	19970527
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Probable Assignee: ABB AB

Assignee(s): (std): FROMM UDO ; ASEA BROWN BOVERIAB ; LEIJON MATS ; JAKSTS ALBERT ; MING LI ; SASSE CHRISTIAN ; SCHUETTE THORSTEN ; GERTMAR LARS ; LIEBL ALBERT GMBH ; ABB AB ; ABB AB VAESTERAAS ; ABB BROWN BOVERI AB ; ASEA BROWN BOVERI

Assignee(s): BROWN BOVERI CO ; ALBERT LIEBL GMBH AND CO MECHANISCHE SYSTEME KG ; ASEA BOVERI AB ; GERMAR LARS ; SCHUTTE THORSTEN ; ASEA BROWN BOVERI AB VAESTERAS ; ASEA BROWN BOVERI AB VAESTERAAS SE ; ASEA BROWN BOVERI A B ; ASEA BROWN BOVERI AB VAESTERAAS ; ASEA BROWN BOVERI AB ; BROWN BOVERI CO SWEDEN GENERAL ELECTRIC CO

Inventor(s): (std): BERGGREN BERTIL ; BERGGREN SOEREN ; BERGGREN SOREN ; BERGKVIST MIKAEL ; BERNHOFF HANS ; BJOERKLUND ANDERS ; ANDERSSON PER ; BJORKLUND ANDERS ; BRANDT LENNART ; CARSTENSEN PETER ; FOMM UDO ; FROMM UDO ; GERMAR LARS ; GERTMAR L ; GERTMAR LARS ; GOERAN BENGT ; GORAN BENGT ; HERNNAES BO ; HERNNAS BO ; HOELLELAND MONS ; HOLLELAND MONS ; HOLMBERG PAER ; HOLMSTROEM GOERAN ; HOLMSTROM GORAN ; IMRELL ANNE MARIE ; ISBERG JAN ; IVARSON CLAES ; JAKST ALBERT ; JAKSTS ALBERT ; DAVIDSON GUNNAR ; DAVIDSSON GUNNAR ; EKBERG MATS ; EKBERG MIKAEL ; JOHANNESSON KENNETH ; KALLDIN HANS OLOF ; KYLANDER GUNNAR ; LARSSON BERTIL ; LEIJON M ; LEIJON MATS ; LEIJON MTS ; LIU RONGSHENG ; MATS LEIJON ; MILTON STEFAN ; MING LI ; NYGREN JAN ANDERS ; REIJOHN MATZ ; RYDHOLM BENGT ; SAASE CHRISTIAN ; SAASE CHRISTIAN ; SASSE CHRISTIAN ; SCH TTE THORSTEN ; SCHUETTE THORSTEN ; SCHUTTE THORSTEN ; SOERENSEN ERLAND ; SORENSEN ERLAND ; SUNESSON ANDERS ; TEMPLIN PETER ; SHUETTE THORSTEN ; JOHANSSON STEFAN G ; BO HERN S ; WINDMAR DAN

Inventor(s): SOEREN BERGGREN ; BERTIL LARSSON ; BERTIL BERGGREN ; BENGT RYDHOLM ; JAN ANDERS NYGREN ; HANS OLOF KALLDIN ; GUNNAR KYLANDER ; GUNNAR DAVIDSSON ; ERLAND SOERENSEN ; CLAES IVARSON ; PETER TEMPLIN ; PETER CARSTENSEN ; MONS HOELLELAND ; THORSTEN SCHUETTE ; THORSTEN SCHUTTE ; UDO FROMM ; SOREN BERGGREN ; SCH³TTE THORSTEN ; RONGSHENG LIU ; PAER HOLMBERG ; PER ANDERSSON ; MONS HOLLELAND ; MIKAEL BERGKVIST ; MIKAEL EKBERG ; M LEIJON ; MATS EKBERG ; LI MING ; LEIJON MATS VAESTERAAS SE ; L GERTMAR ; LARS GERTMAR ; ERLAND SORENSEN ; JAN ISBERG ; GORAN HOLMSTROM ; GUNNAR DAVIDSON ; HANS BERNHOFF ; CHRISTIAN SASSE ; DAN WINDMAR ; BO HERNNAS ; ANNE MARIE IMRELL ; BENGT GORAN ; BJOERKLUND ANDERS VAESTERAAS SE ; ALBERT JAKST ; ALBERT JAKSTS ; ANDERS BJORKLUND ; ANDERS SUNESSON

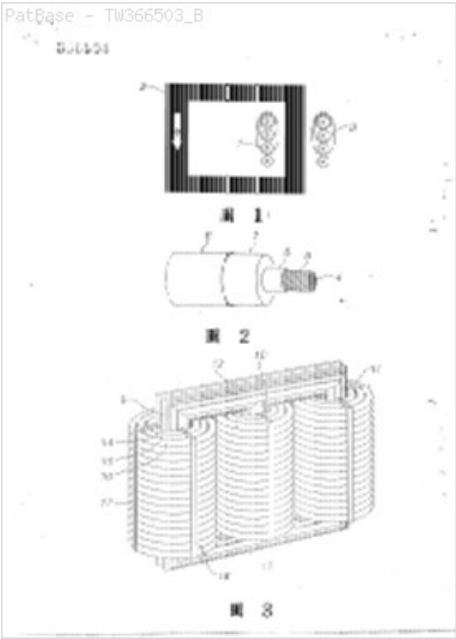
Agent(s): DYKEMA GOSSETT PLLC

Designated states: AL AM AT AU AZ BA BB BE BG BR BY CA CH CN CU CZ DE DK EE ES FI FR GB GE GH GR HU IE IL IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MC MD MG MK MN MW MX NL NO NZ PL PT RO RU SD SE SG SI SK SZ TJ TM TR TT UA UG US UZ VN YU

Title: TRANSFORMER/REACTOR

Abstract: Source: TW366503B The present invention relates to a power transformer/reactor (14, 15, 16) wherein the windings are manufactured of a cable comprising at least one conductor consisting of a number of strands with an inner semiconducting layer disposed around the strands. Outside of this inner semiconducting layer is the main insulation of the cable in the form of a solid insulation and surrounding this solid insulation is an outer semiconducting layer. The use of such a cable entails significant advantages from the insulation point of view in relation to conventionally manufactured and wound power transformers/reactors, which in turn means that these can be made without oil for insulation and cooling.

Classifications:
International (IPC 8-9): H01F27/00 H01F27/28 H01F27/32 H01F27/34 H01F29/00 H01F29/14 H01F3/10 H01F3/14 H02H3/02 H02J3/36 H02K15/00 H02K15/12 H02K23/38 H02K3/14 H02K3/28 H02K3/30 H02K3/40 H02K3/48 H02M3/24 H02M7/04 H02M7/155 (Advanced/Invention); H02K9/19 (Advanced/Non-invention); H01F27/00 H01F27/28 H01F27/32 H01F27/34 H01F29/00 H01F3/00 H02H3/02 H02J3/36 H02K15/00 H02K15/12 H02K23/26 H02K3/00 H02K3/12 H02K3/28 H02K3/32 H02K3/48 H02M7/04 H02M7/12 (Core/Invention); H01F29/00 H02K9/19 (Core/Non-invention)
International (IPC 1-7): H01F27/32 H01F29/00 H02K23/38 H02K3/30 H02M7/155
CPC: Y10S174/13 Y10S174/14 Y10S174/20 Y10S174/24 Y10S174/25 Y10S174/26 H02K15/12 H01F3/10 H01F3/14 H01F27/288 H01F27/323 H01F27/34 H01F29/14 H01F2027/329 H01F2029/143 H02H3/025 H02K3/14 H02K3/28 H02K3/40 H02K3/48 H02K9/19 H02K15/00 H02K2203/15
European: H01F27/28G H01F27/32C H01F27/34 H01F29/14 H01F3/10 H01F3/14 H02H3/02C H02K15/00 H02K15/12 H02K3/14 H02K3/28 H02K3/40 H02K3/48 T01F27/32F T01F29/14A T02K203/15 T02K3/40 T02K9/19



Family:

Publication number	Publication date	Application number	Application date
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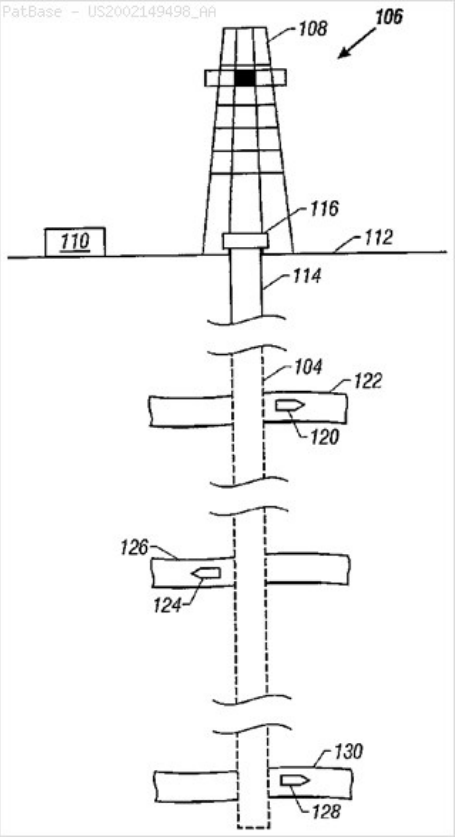
Priority:
SE19960002079 19960529 SE19970000335 19970203 SE19950002079 19960529

Probable Assignee: ASEA BROWN BOVERI
Assignee(s): (std): ABB AB ; ASEA BROWN BOVERI
Assignee(s): ASEA BROWN BOVERI AB ; ASEA BROWN BOVERI ABSE
Inventor(s): (std): FROMM UDO ; GERTMAR LARS ; JAKSTS ALBERT ; LEIJON MATS ; LI MING ; MATS LEIJON ; MING LI ; SASSE CHRISTIAN ; SCHUTTE THORSTEN
Inventor(s): THORSTEN SCHUTTE ; UDO FROMM ; ALBERT JAKSTS ; CHRISTIAN SASSE

Title: RESERVOIR MONITORING THROUGH WINDOWED CASING JOINT

Abstract: Source: US2002149498A An apparatus and a method for controlling oilfield production to improve efficiency includes a remote sensing unit that is placed within a subsurface formation, an antenna structure for communicating with the remote sensing unit, a casing joint having nonconductive "windows" for allowing an internally located antenna to communicate with the remote sensing unit, and a system for obtaining subsurface formation data and for producing the formation data to a central location for subsequent analysis. The remote sensing unit is placed sufficiently far from the wellbore to reduce or eliminate effects that the wellbore might have on formation data samples taken by the remote sensing unit. The remote sensing unit is an active device with the capability of responding to control commands by determining certain subsurface formation characteristics such as pressure or temperature, and transmitting corresponding data values to a wellbore tool. Some embodiments of the remote sensing unit include a battery within its power supply. Other embodiments include a capacitor for storing charge. In order for a communication link to be established with the remote sensing unit through a wireline tool in a cased well, a casing joint includes at least one electromagnetic window that is formed of a non-conductive material that will allow electromagnetic signals to pass through it. In the preferred embodiment, the electromagnetic windows are formed to substantially circumscribe the casing joint to render it largely rotationally invariant. The electromagnetic windows are formed of any rigid and durable non-conductive material including, by way of example, either ceramics or fiberglass.

Classifications:
International (IPC 8-9): E02D1/00 E21B23/00 E21B23/14 E21B29/06 E21B33/13 E21B43/00 E21B44/00 E21B47/00 E21B47/01 E21B47/024 E21B47/04 E21B47/06 E21B47/09 E21B47/12 E21B49/00 E21B49/08 E21B49/10 E21B7/06 E21B7/08 G01V1/22 G01V1/52 G01V3/00 G01V3/30 G01V3/34 H01Q1/36 H01Q7/00 H01Q9/00 H04B7/00 (Advanced/Invention); E21B47/00 E21B49/00 (Advanced/Non-invention); E21B44/00 E21B47/06 E21B47/12 G01V1/22 G01V1/40 G01V3/18 H01Q7/00 H01Q9/00 (Core/Invention); E21B (Subclass/Invention)
International (IPC 1-7): E02D1/00 E21B17/00 E21B23/00 E21B23/14 E21B33/13 E21B43/11 E21B43/116 E21B43/119 E21B44/00 E21B47/00 E21B47/01 E21B47/024 E21B47/04 E21B47/06 E21B47/09 E21B47/12 E21B47/14 E21B47/16 E21B47/18 E21B49/00 E21B49/08 E21B49/10 E21B7/04 E21B7/08 G01B5/18 G01B7/26 G01L15/00 G01N1/40 G01N34/100 G01V1/22 G01V1/40 G01V1/52 G01V11/00 G01V3/00 G01V3/30 G01V3/34 G08C17/02 H01N9/00 H01Q7/00 H01Q9/00 H04B1/02 H04B7/00
CPC: E21B49/00 E21B7/06 E21B23/00 E21B47/01 E21B47/011 E21B47/12 E21B49/10 E21B7/061 E21B23/14 E21B33/13 E21B47/024 E21B47/044 E21B47/09 E21B47/122 E21B29/06 E21B47/124 E21B47/04
European: E21B23/00 E21B23/14 E21B29/06 E21B33/13 E21B47/01 E21B47/01P E21B47/024 E21B47/04 E21B47/04R E21B47/09 E21B47/12 E21B47/12M E21B47/12S E21B49/00 E21B49/10 E21B7/06 E21B7/06B
US: 138/177 138/92 138/94 166/113 166/117.5 166/177.6 166/250.01 166/250.07 166/250.11 166/250.110P 166/250.15 166/250.150S 166/254.1 166/254.2 166/297 166/297S 166/380 166/66 175/45 175/50 175/61 324/329 324/333 324/338 324/369 340/853.1 340/853.100P 340/853.2 340/853.200S 340/853.3 340/853.8 340/853.800S 340/854.4 340/854.5 340/854.500P 340/854.6 340/855.8 340/855.800S 340/856.2 340/856.3 367/82 702/6 73/152.46 73/152.54



Family:

Publication number	Publication date	Application number	Application date
AU199868090 A1	19981203	AU19980068090	19980526
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AU2003204587 AA	20040108	AU20030204587	20030606
AU2005202703 AA	20050721	AU20050202703	20050722
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CN1092745 C	20021016	CN19981014898	19980529
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US6943697 BB	20050913	US20020157586	20020528
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Priority:

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Probable Assignee: SCHLUMBERGER TECHNOLOGY CORP

Assignee(s): (std): ANADRILL INT SA ; SCHLUMBERGER HOLDINGS ; SCHLUMBERGER CA LTD ; SCHLUMBERGER HOLDING LTD ; SCHLUMBERGER HOLDING S A ; SCHLUMBERGER SERVICES PETROL ; SHLJUMBERGER K HOLDINGZ LTD ; SCHLUMBERGER TECHNOLOGY CORP ; SCHLUMBERGER TECHNOLOGY BV ; ANADRIL INTERNEHSHNL S A ; ANADRILL INT S A ; SCHLUMBERGER HOLDINGS LTD ; SCHLUMBERGER CANADA LTD

Assignee(s): SERVICES PETROLIERS SCHLUMBERGER PARIS ; SCHLUMBERGER HOLDINGS LTD ROAD TOWN ; TABANOU JACQUES R ; SEZGINER ABDURRAHMAN ; ANADRILL INT S A PANAMA ; ANADRIL INTERNEHSHNL SA ; SERVICES PETROLIERS SCHLUMBERGER ; SCHULUMBERGER TECHNOLOGY CORP ; SCHLUMBERGER TECH CORP ; BRYANT IAN D ; CIGLENEC REINHART ; REID LENNOX E ; HUTIN REMI ; ECKERSLEY CLIVE P ; CHOUZENOUX CHRISTIAN ; FIELDS TROY ; LIBERMAN ARTHUR ; MACDOUGALL THOMAS D ; HAVLINEK KENNETH L ; EDWARDS JOHN E ; SCHLNMBERGER HOLDINGS LTD

Inventor(s): (std): ABDURRAHMAN SEZGINER ; ABDURRAHMAN SEZQINER ; ARTHUR LIBERMAN ; BRYANT IAN ; BRYANT IAN D ; CHOUZENOUX CHRISTIAN ; CHRISTIAN CHOUZENOUX ; CIGLENEC R ; CIGLENEC REINHARD ; CIGLENEC REINHART ; CLIVE P ECKERSLEY ; ECKERSLEY CLIVE ; ECKERSLEY CLIVE P ; EDWARDS JOHN E ; FIELDS TROY ; GIVEN NO NAME ; HAVLINEK KENNETH ; HAVLINEK KENNETH L ; HUTIN R ; HUTIN REMI ; IAN D BRYANT ; J R TABANO ; R ZIGLENE ; RAJNKHART SIGLENEK ; REID LENNOX E ; REID LENOX E ; REID LENOX E JR ; REINHARD CIGLENEC ; REINHART CIGLENEC ; REMI HUTIN ; REMI JUTEHN ; SCHLUMBERGER HOLDINGS LIMITED ; SCHLUMBERGER HOLDINGS LTD ; SEZGINER ABDURRAHMAN ; SEZQINER ABDURRAHMAN ; SIGLENEK REJNKHART ; SIGLERNICK R ; TABANO J R ; TABANOU JACQUES ; TABANOU JACQUES R ; TABANOU JACQUES RENE ; TABANOU JAQUES ; TABANOU JAQUES R ; TABANU ZHAK R ; JOHN E EDWARDS ; JR TABUNOU ; KENNETH HAVLINEK ; KENNETH L HAVLINEK ; L E LEID ; LEID L E ; LEID R SIGLERNICK L E ; LIBERMAN ARTHUR ; LIBERMAN ARTHUR D ; MACDOUGALL THOMAS ; MACDOUGALL THOMAS D ; R CIGLENEC ; R HUTIN ; R SIGLERNICK ; TABUNOU J R ; TABUNOU JACQUES R ; THOMAS D MACDOUGALL ; TROY FIELDS ; ZHAK R TABANU ; JACQUES R TABANOU ; JACQUES R TABUNOU ; ZIGLENE R

Inventor(s): JACQUES TABANOU ; R SIGLERNICK L E LEID ; NO NAME GIVEN ; J R TABUNOU

Agent(s): GRIFFITH HACK; SMART AND BIGGAR; JENNIE; BRIGITTE L; SALAZAR JENNIE J L; SEGURA VICTOR H; ECHOLS BRIGITTE L; MATTHIAS; DALE V

Designated states: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

Title: MODIFICATION OF ICE FRICTION IN TRANSPORTATION SYSTEMS

Abstract: Source: US2001052731A A plurality of electrodes in a solid object are located proximate to the contact interface between an ice layer and the surface of the solid object. A power source provides a potential difference across the electrodes to generate an electric field at the contact interface, thereby increasing the friction force between the solid object and the ice. Preferably, the power source is in AC power source. A capacitor in series between the power source and the electrodes creates an additional impedance for limiting the AC current to a level safe for human exposure.

Classifications:

International (IPC 8-9): A43B13/22 A63C5/044 B23K10/00 B60C19/00 B60S1/02 B60S1/38 B63J2/00 B63J99/00 B64D1/00 B64D15/00 B64D15/12 B64D15/16 C09K3/18 E01C11/26 E01D19/00 E01H5/00 F25C5/02 F25C5/04 G01N27/04 G01N33/00 H01B7/17 H02G1/02 H02G7/00 H02G7/16 H05B1/00 H05B3/00 H05B3/34 H05B3/56 H05B3/58 H05B3/84 H05B6/00 H05B6/02 H05B6/54 H05B6/62 H05B6/70 (Advanced/Invention); B60S1/02 B63J2/00 B63J99/00 B64D15/00 B64D15/12 C09K3/18 E01H5/00 F25D21/08 G01N27/04 G01N33/00 H05B1/00 H05B3/34 (Advanced/Non-invention); A43B13/14 A63C5/00 B23K10/00 B60C19/00 B60S1/02 B60S1/38 B63J2/00 B63J99/00 B64D15/00 C09K3/18 E01C11/24 E01D19/00 F25C5/00 H01B7/17 H02G7/16 H05B3/00 H05B3/34 H05B3/54 H05B3/84 H05B6/00 (Core/Invention); B64D15/00 F25D21/08 (Core/Non-invention)

International (IPC 1-7): A43B13/22 A47F3/04 A63C5/044 B60C19/00 B60R16/00 B60S1/02 B64D B64D15/00 B64D15/12 B64F B64F1/00 C02F1/461 C09K3/18 F25C5/02 F25D21/00 F25D21/06 G01N27/04 G01N33/00 H01B7/00 H01B7/17 H01H47/00 H02G7/16 H02M1/00 H05B1/00 H05B3/00 H05B3/02 H05B6/00 H05B6/02 H05B6/10 H05B6/54 H05B6/62 H05B6/70

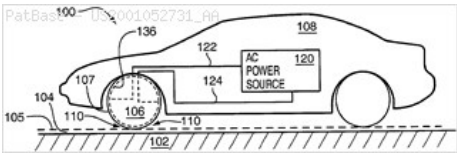
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European: B60S1/02B2 B60S1/38B2 B63J2/00 B63J5/00 B63J99/00 B64D15/00 B64D15/12 B64D15/16B B82Y30/00 E01C11/26B E01D19/00 H02G7/16 H05B3/00 H05B3/34B4 H05B3/56 H05B3/58 H05B3/84 H05B6/62 L82T201/01T R25D21/08 T05B203/005 T05B203/006 T05B203/007 T05B203/009 T05B203/011 T05B203/013 T05B203/016 T05B203/017 T05B214/02

US: 174/11 174/110.00R 174/110.00RP 174/110.00RS 174/110R 174/19 174/19P 174/40.00R 174/40R 204/242 205/628 205/630 205/734 205/734S 205/742 219/121.37 219/121.38 219/121.51 219/121.59 219/201 219/209 219/209S 219/538 219/636 219/770 219/772 219/78 219/780 244/134 244/134.00D 244/134.00DP 244/134.00R 244/134D 244/134R 280/757 307/10.1 307/10.100P 307/41 315/111.21 361/144 363/1 363/1P 392/311 392/311S 62/15 62/150 62/150S 62/154 62/154S 62/248 62/248S 62/272 62/272P 62/275 62/275S 62/276 62/8 62/80 62/80S

Family:

Publication number	Publication date	Application number	Application date
AT355222 E	20060315	AT19990956694T	19991026
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AU200013242 A5	20000515	AU20000013242	19991026
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Priority:

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US20020222403	20020816				

Probable Assignee: TRUSTEES OF DARTMOUTH COLLEGE

Assignee(s): (std): DATEMOS COLLEGE BOARD ; DERESH LEV ; PETRENKO VICTOR ; PETRENKO VICTOR F ; SULLIVAN CHARLES R ; SULLIVAN CHARLES ; TRASTIZ OF DARTMUT KOLLEDZH ; TRUSTEES OF DARTMOUTH COLLEGE ; DARTMOUTH COLLEGE

Assignee(s): DARTMOUTH COLLEGE TRUSTEES OF ; PETRENKO VLCTOR F ; TRUSTEES OF DARTMOUTH COLLEGE HANOVER ; THE TRUSTEES OF DARTMOUTH COLLEGE ; NATIONAL SCIENCE FOU ; NATIONAL SCIENCE FOUADATION ; NATIONAL SCIENCE FOUADATION OFFICE OF GENERAL ; NATIONAL SCIENCE FOUNDATION

Inventor(s): (std): CHARLES SULLIVAN ; DERESH LEV ; LEV DERESH ; PETELINK WIKTO F ; PETRENKO VICTOR ; PETRENKO VICTOR E ; PETRENKO VICTOR F ; PETRENKO VIKTOR ; PETRENKO VIKTOR F ; PETRENKO VLCTOR F ; SALLIVAN CHARL Z ; SULLIVAN CHARLES ; SULLIVAN CHARLES R ; VICTOR F PETRENKO ; VICTOR PETRENKO ; WIKTO F PETELINK

Inventor(s): SALLIVAN CHARL'Z

Agent(s): SMART AND BIGGAR; BIBBY WILLIAM MARK; WOLFF BREGMAN AND GOLLER; LATHROP AND GAGE LC; LATHROP AND GAGEM LC; LATHROP AND GAGE LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZM ZW

Title: LOADBREAK CONNECTOR ASSEMBLY WHICH PREVENTS SWITCHING FLASHOVER

Abstract: Source: US2002164896A Loadbreak connectors which are modified to reduce the probability of flashover upon disassembly operation of a loadbreak bushing insert from a power cable elbow connector. The bushing insert is provided with vents to vent a cavity formed between the elbow cuff and the transition shoulder portion of the bushing insert with ambient air to avoid a decrease in pressure within the connection region and avoid a decrease in the dielectric strength of the air therein thus preventing flashover. The vents can be provided directly on the transition shoulder portion of the insert, an elbow seating indicator band or on a bushing insert interface shell. Additionally, the band and the shell may be formed of a bright contrasting color which serves to indicate whether the loadbreak connector is improperly assembled. The shell further reduces friction upon assembly of the connector.

Classifications:

International (IPC 8-9): B29C45/14 H01H33/62 H01H33/65 H01H83/00 H01R13/00 H01R13/46 H01R13/504 H01R13/52 H01R13/53 H01R13/629 H01R13/633 H01R13/641 H01R24/02 H01R4/60 H01R43/00 H01R43/26 H02G15/06 H02G15/08 (Advanced/Invention); H01H83/00 H01R13/504 H01R13/53 H01R13/629 H01R13/633 H01R13/648 H01R24/00 H01R33/76 (Advanced/Non-invention); H01H33/60 H01H83/00 H01R13/00 H01R13/53 H02G15/02 H02G15/08 (Core/Invention); H01R13/53 (Core/Non-invention)

International (IPC 1-7): A01R13/53 B29C45/14 H01H33/62 H01H83/00 H01R13/00 H01R13/46 H01R13/504 H01R13/53 H01R13/629 H01R13/633 H01R13/648 H01R24/02 H01R4/60 H01R43/00 H02G15/06 H02G15/08 **CP:** Y10S439/921 H01R43/26 H01R13/5216 H01R13/5221 H01R13/53 H01R13/629 H01R13/648 H01R24/20 H01R33/7678 H01R2101/00 Y10T29/49204 Y10T29/49208 Y10T29/49218 Y10T29/4922 Y10T29/49224

European: H01R13/52M H01R13/52P1 H01R13/53 H01R43/26 T01R101/00 T01R13/53 T01R13/629 T01R13/648 T01R24/20 T01R33/76L

US: 174/73.1 29/874 29/876 29/882 29/883 29/885 439/183 439/183P 439/185 439/187 439/187P 439/206 439/206S 439/730 439/88 439/921

Family:

Publication number	Publication date	Application number	Application date
CA2244379 AA	19990130	CA19982244379	19980727
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CA2298193 AA	20001007	CA20002298193	20000207
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US7044760 BB	20060516	US20040751836	20040105
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Priority:

US19970902749 19970730	CA19982244379 19980727	US19990287915 19990407
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Probable Assignee: THOMAS AND BETTS INT LLC

Assignee(s): (std): THOMAS AND BETTS CORP ; THOMAS AND BETTS INTERNATION ; THOMAS AND BETTS INT ; THOMAS AND BETTS INT INC ; THOMAS AND AMP BETTS INTERNATION

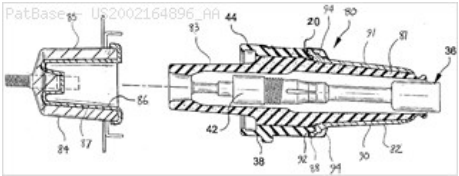
Assignee(s): THOMAS AND BETTS INT LLC ; THOMAS AND BETTS CORP T AND B ; THOMAS AND BETTS CORP T AMP AMP ; BETTS INT INC ; BORGSTROM ALAN D ; SIEBENS LARRY N ; STEPANIAK FRANK M ; THOMAS AMP AMP ; THOMAS AND

Inventor(s): (std): BORGSTROM ALAN D ; FRANK M STEPANIAK ; LARRY N SIEBENS ; SIEBENS LARRY N ; STEPANIAK FRANK M

Inventor(s): STEPANIAK FRANK ; ALAN D BORGSTROM ; BORGSTROM ALAN ; SIEBENS LARRY

Agent(s): HOFFMANN AND BARON LLP; HOFFMAN AND BARON LLP

Designated states: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR



Title: HERMETIC FEEDTHROUGH FOR AN IMPLANTABLE DEVICE

Abstract: Source: US2001039374A The present invention provides an implantable substrate sensor comprising electronic circuitry formed within, or on, a substrate. A protective coating then covers the substrate, forming a hermetically sealed package having the circuitry under the coating. The circuitry has electrically conductive pads for communicating and/or providing power to the circuitry. Electrical pathways provide hermetic electrical connection to the conductive pads for external connection to the sealed circuitry. In a first embodiment, the pathway is a via that is made from a biocompatible material that is made hermetic by either increasing its thickness or by ion **beam** deposition. Alternatively, the pathways are formed from metal traces, surrounded by a biocompatible insulation material, essentially parallel to the surface of the substrate that are connected to the conductive pads by first vias and have second ends externally accessible to the sealed package to provide external electrical connection to the hermetically sealed circuitry within.

Classifications:

International (IPC 8-9): A61B19/02 A61B5/00 A61B5/145 A61B5/1459 A61B5/1473 A61B5/1486 A61M5/172 A61N1/05 A61N1/365 A61N1/372 A61N1/375 A61N5/00 H01L21/56 H01L21/60 H01L23/02 H01L23/31 H01L23/50 H01L23/538

H01L29/06 (Advanced/Invention); A61M5/172 A61N1/05 A61N1/365 A61N1/372 (Advanced/Non-invention)

International (IPC 1-7): A61B19/02 A61B5/00 A61B5/04 A61B5/14 A61B5/145 A61N1/00 A61N1/05 A61N1/365 A61N1/372 H01L21/00 H01L21/44 H01L21/48 H01L21/50

CPC: H01L2924/0002 A61N1/36585 A61M5/1723 A61N1/372 H01L29/0657 A61B5/0031 A61B5/01 A61B5/145 A61B5/14532 A61B5/14546 A61B5/1473 A61B5/14865 A61B5/4839 A61B2560/0219 A61M2205/0244 A61N1/05 A61N1/375 A61N1/3754 H01L23/3107 H01L23/5387 H01L2924/19041

European: A61B5/145G A61B5/145P A61B5/1473 A61B5/1486B A61B5/4832 A61N1/05 A61N1/365C A61N1/372 A61N1/375A2 H01L23/31H H01L23/538J H01L29/06C K61B5/00B9 K61B5/01 K61B5/145 K61B560/02B4B K61M205/02M K61M5/172B K61N1/05 K61N1/375 T01L924/19041

US: 128/899 206/438 257/E23.124 257/E23.124S 257/E29.022 257/E29.022S 438/1 438/127 438/49 438/667 600/300 600/300P 600/309 600/323 600/345 600/347 600/364 600/365 600/373 600/373P 600/377 600/393 607/116 607/116P 607/2 607/22 607/36 607/60

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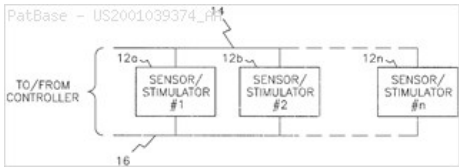
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US7079881 BB	20060718	US20020288038	20021104
US7555328 BB	20090630	US20060392163	20060329
WO02102267 A1	20021227	WO2002US15810	20020517
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Priority:

US19970928867	19970912	US19980100310	19980619	EP19980946039	19980911
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US20060392163	20060329	US20020288038	20021104	US19990360342	19990722
US20000718782	20001122	WO1999US08979	19990426		

Probable Assignee: MANN ALFRED E FOUND SCIENT RES

Assignee(s): (std):	ALFRED E MANN FOUNDATION ; ALFRED E MANN FOUNDATION FOR SCIENTIFIC RESEARCH ; ALFRED E MANN FOUNDATIONFOR SC ; MANN ALFRED E FOUND SCIENT RES
Assignee(s):	SCHULMAN JOSEPH H ; SCHULMAN JOSEPH ; AFRED E MANN FOUNDATION FOR SCIENTIFIC RESEARCH ; AFRED E MANN FOUNDATION FOR SCIENTIFIC RESEARCH PO ; ALFRED E MANN FOUNDATIONFOR SCIENTIFIC RESEARCH SA ; ALFRED E MANN FOUNDATIONFOR SCIENTIFIC RESEARCH SANTA CLARA ; GORD JOHN C ; ALFRED E MANN FOUNDATION FOR SCIENTIFIC RESEARCH S ; ALFRED E MANN FOUNDATION FOR SCIENTIFIC RESEARCH SANTA CLARITA
Inventor(s): (std):	JOHN C GORD ; JOSEPH H SCHULMAN ; JOSEPH SCHULMAN ; LYLE DEAN CANFIELD ; SHAH RAJIV ; SCHULMAN JOSEPH H ; SCHULMAN JOSEPH ; GORD JOHN C ; CANFIELD LYLE DEAN ; BYERS CHARLES L ; CANFIELD LYLE D ; CHARLES L BYERS ; GORD C
Inventor(s):	GORD JOHN ; BYERS CHARLES ; CANFIELD LYLE
Agent(s):	RUSCHKE HANS EDVARD; FOLEY AND LARDNER; FOLEY AND LARDNER LLP
Designated states:	AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW



Title: PERCUTANEOUS INTRAMUSCULAR STIMULATION SYSTEM

Abstract: Source: US2002077572A A percutaneous, intramuscular stimulation system for therapeutic electrical stimulation of select muscles of a patient includes a plurality of intramuscular stimulation electrodes (50) for implantation directly into select muscles of a patient and an external battery-operated, microprocessor-based stimulation pulse train generator (10) for generating select electrical stimulation pulse train signals (T). A plurality of insulated electrode leads (40) percutaneously, electrically interconnect the plurality of intramuscular stimulation electrodes (50) to the external stimulation pulse train generator (10), respectively. The external pulse train generator (10) includes a plurality of electrical stimulation pulse train output channels (E) connected respectively to the plurality of percutaneous electrode leads (40) and input means (24, 26, 28) for operator selection of stimulation pulse train parameters (PA, PD, PF) for each of the stimulation pulse train output channels (E) independently of the other channels. Visual output means (20) provides visual output data to an operator of the pulse train generator (10). Non-volatile memory means (66,68) stores the stimulation pulse train parameters for each of the plurality of stimulation pulse train output channels (E). The generator (10) includes means for generating stimulation pulse train signals (100,102) with the selected pulse train parameters on each of the plurality of stimulation pulse train output channels (E) so that stimulus pulses of the pulse train signals having the select stimulation pulse train parameters pass between the intramuscular electrodes (50) respectively connected to the stimulation pulse train output channels (E) and a reference electrode (52).

Classifications:

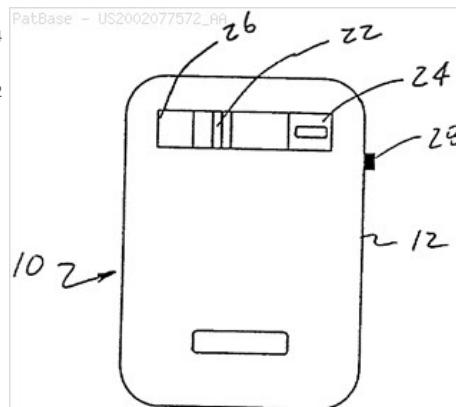
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International (IPC 1-7): A61H1/00 A61H1/02 A61H5/00 A61N1/18 A61N1/26 A61N1/32 A61N1/36 A61N1/372 H03K3/78

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European: A61N1/05L A61N1/36A A61N1/36E A61N1/36E4 A61N1/36Z A61N1/36Z3C K61N1/05L8 K61N1/36A K61N1/36E K61N1/36E2 K61N1/36E4 K61N1/36Z K61N1/36Z3C

US: 29/825 601/15 601/15P 607/115 607/116 607/116S 607/118 607/149 607/152 607/2 607/2P 607/34 607/37 607/46 607/46P 607/48 607/48P 607/48S 607/50 607/74

**Family:**

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Priority:

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Probable Assignee: NDI MEDICAL LLC

Assignee(s): (std): BENNETT MARIA E ; BOGGS II JOSEPH W ; BOGGS III JOSEPH W ; BOGGS JOSEPH W ; FANG ZI PING ; GALECKI STEVEN M ; INMANN ANDREAS ; MARKS MICHAEL ; CHAE JOHN ; NEUROCONTROL CORP ; NEURROCONTROL CORP ; NDI MEDICAL LLC ; RUNDLE KENNETH P ; THROPE GEOFFREY B ; RUBIN STUART F ; STROTHER ROBERT B ; SAKAI JONATHAN L ; STAGER KATHRYN W ; RUBIN STUART ; SAKAI JOHNATHAN L ; NDI MEDICAL INC ; SPR THERAPEUTICS LLC ; MRVA JOSEPH J ; ZANG ROSEMARY H ; WALKER MARIA E

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Inventor(s): (std): BOGGS JOSEPH W ; FANG ZI PING ; POURMEHDI SOHEYL ; S POURMEHDI ; SOHEYL POURMEHDI ; WALKER MARIA ; WALKER MARIA E ; Z P FANG ; ZI PING FANG ; ZANG ROSEMARY H ; THROPE GEOFFREY B ; STROTHER ROBERT B ; SAKAI JOHNATHAN L ; RUNDLE KENNETH P ; RUBIN STUART F ; INMANN ANDREAS ; BOGGS III JOSEPH W ; BOGGS II JOSEPH W ; BENNETT MARIA E ; POURMEHDI S ; MRVA JOSEPH J ; MARKS MICHAEL ; STAGER KATHRYN W ; SAKAI JONATHAN L ; RUBIN STUART ; GALECKI STEVEN M ; FANG Z P ; CHAE JOHN ; BOGGS JOSEPH W II

Inventor(s): ROBERT B STROTHER ; MARIA E BENNETT ; KENNETH P RUNDLE ; JOSEPH W BOGGS II ; JONATHAN L SAKAI ; GEOFFREY B THROPE ; STUART F RUBIN ; ANDREAS INMANN

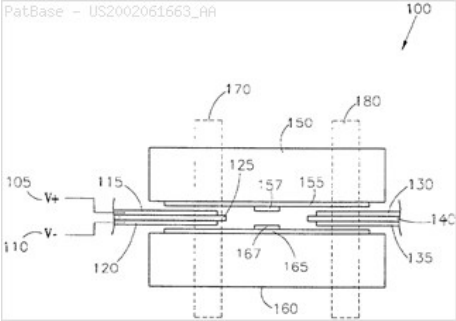
Agent(s): DEE IAN MARK ; RYAN KROMHOLZ AND MANION SC ; DANIEL D RYAN RYAN KROMHOLZ AND MANION SC ; RYAN KRUMHOLZ AND MANION SC ; MCDONALD HOPKINS LLC

Designated states: AL AT AU BA BE BG CA CH CN CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO NZ PL PT RO RS SE SI SK SM TR

Title: POWER SUPPLY OUTPUT CABLE OF METAL PLATES SOLDERED TO CONNECTION INTERFACES WITH EMBEDDED CAPACITOR ARRAY TO PROVIDE LOW INDUCTANCE RAPID STARTUP CURRENT

Abstract: Source: US2002061663A The present invention discloses power supply cable for providing DC power from a power supply to a microprocessor of a personal computer. The output cable includes a plate-cable includes a first and a second metal plates insulated with an insulation layer between the first and second metal plates. The output cable further includes a plurality of capacitors disposed on the plate cable. Each of the capacitors has a first and second electrical terminals and each of the first and second electrical terminals connected to one of the first and second metal layers provided for storing electrical charges therein for transmitting through the metal layers for supplying power to the microprocessor. In a preferred embodiment, the plurality of capacitors disposed on the first metal plate with the first electrical terminal for each of the capacitors connected to the first metal plate. The plate-cable further includes a plurality of via-connectors penetrating the insulation layer for connecting the second electrical terminal for each of the capacitors to the second metal plate. In another preferred embodiment, the plate-cable further includes multiple insulated plate-segments each of the plate-segment is provided for supplying power of a different voltage to the microprocessor. In another preferred embodiment, the output cable further includes a microprocessor connector socket soldering to an output end the plate-cable.

Classifications:
International (IPC 8-9): G06F1/26 H01R12/04 H01R12/06 H01R12/16 H01R12/24 H01R12/26 H01R27/00 (Advanced/Invention); G06F1/26 H01R12/00 (Core/Invention)
International (IPC 1-7): G06F1/18 H01R11/00 H01R12/00 H01R12/06 H01R12/16 H01R12/26 H01R24/00 H01R27/00 H01R4/00 H01R4/48 H01R43/00 H01R43/20 H01R9/00 H02J1/02 H05K1/00 H05K3/32
CPC: G06F1/26
European: G06F1/26
US: 439/60 439/60P 439/632



Family:

Publication number	Publication date	Application number	Application date
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CN1245354 A	20000223	CN19991011096	19990729
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JP2000208182 A2	20000728	JP19990167929	19990615
JP3122817 B2	20010109	JP19990167929	19990615
TW429650 B	20010411	TW19990100084	19990105
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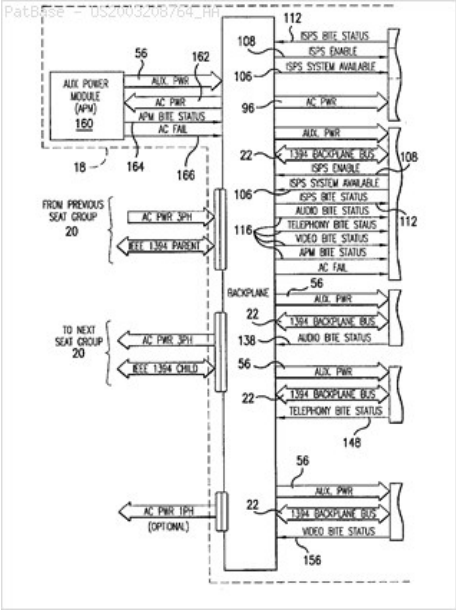
Priority:
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Probable Assignee: DELTA ELECTRONICS INC
Assignee(s): (std): DELTA ELECTRONICS INC ; TAIDA ELECTRONIC IND CO L ; TAIDA ELECTRONIC IND CO LTD
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Inventor(s): CHENG BRUCE CH

Title: AIRCRAFT DATA MANAGEMENT SYSTEM

Abstract: Source: US2003208764A An aircraft data management system provides a passenger seated on the aircraft with a number of entertainment and productivity enhancing options. Such options include, without limitation, video, audio, internet, airplane systems data and power. Located proximate to each seat group is an integrated seat box that includes a network interface card that identifies a requesting passenger for proper directing of the required data and/or power from devices that interface with a network controller back to the requesting passenger. Both on-aircraft and off-aircraft devices may be accessed by the system. While particularly drawn to aircraft, the data management system is also applicable to other venues have identifiable seating locations such as buses, passenger ships, hotels and auditoriums.

Classifications:
International (IPC 8-9): B64D11/00 B64D45/00 B64D47/00 G05B15/02 H04N21/214 H04N21/222 H04N21/231 H04N21/24 H04N21/27 H04N21/4143 H04N21/4363 H04N21/472 H04N21/4788 H04N21/61 H04N21/81 H04N7/173 H04N7/24 (Advanced/Invention); B64D45/00 B64D47/00 H04N5/00 H04N7/173 (Advanced/Non-invention); G05B15/02 H04N5/00 H04N7/24 (Core/Invention)
International (IPC 1-7): B64D11/00 B64D45/00 B64D47/00 G05B15/00 G05B15/02 H04L12/28 H04N7/08 H04N7/173 H04N7/18 H04N7/17318 H04N21/2146 H04N21/2221 H04N21/231 H04N21/2404 H04N21/27 H04N21/4143 H04N21/43632 H04N21/47202 H04N21/4788 H04N21/6125 H04N21/6143 H04N21/6162 H04N21/8106 H04N21/8126
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US: 348/E05.002 348/E05.008 348/E07.071 348/E5.002 348/E5.008 348/E50.02S 348/E50.08S 348/E7.071 348/E70.71S 375/E07.019 375/E70.19S 700/295 700/83 725/76 725/76P 725/77 725/79 725/82



Family:

Publication number	Publication date	Application number	Application date
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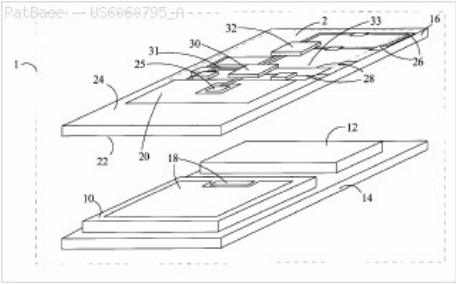
Priority:
US19980103823P 19981009 US19990411036 19991004 US20010817477 20010326
WO1999US23359 19991007 US19990411063 19991004

Probable Assignee: ASTRONICS ADVANCED ELECTRONIC SYSTEMS CORP
Assignee(s): (std): GEN DYNAMICS OTS AEROSPACE INC ; PRIMEX AEROSPACE CO ; PRIMEX AEROSPACE COMPANY
Assignee(s): GENERAL DYNAMICS OTS (AEROSPACE) INC ; ARMSTRONG GREGG D ; ASTRONICS ADVANCED ELECTRONIC SYSTEMS CORP ; BRISKI RORY G ; BURGESS CRAIG L ; GALIPEAU STEVEN R ; GENERAL DYNAMICS OTS INC ; WADE JOHN G ; PEABODY MARK A ; MOWRY MICHAEL M ; GRAY KENNETH L ; SPEARS GARRETT R ; GENERAL DYNAMICS OTS AEROSPACE INC ; PRIMEX AEROSPACE CO REDMOND
Inventor(s): (std): ARMSTRONG D ; ARMSTRONG GREGG D ; BRISKI G ; BRISKI RORY G ; BURGESS CRAIG L ; BURGESS L ; GALIPEAU R ; GALIPEAU STEVEN R ; GRAY KENNETH L ; GRAY L ; MOWRY M ; MOWRY MICHAEL M ; PEABODY A ; PEABODY MARK A ; SPEARS GARRETT R ; SPEARS R ; WADE G ; WADE JOHN G
Inventor(s): STEVEN R GALIPEAU ; RORY G BRISKI ; GREGG D ARMSTRONG ; JOHN G WADE ; KENNETH L GRAY ; MARK A PEABODY ; MICHAEL M MOWRY ; GARRETT R SPEARS ; GRAY ; CRAIG L BURGESS
Designated states: AT AU BE CA CH CY DE DK ES FI FR GB GR IE IT JP LI LU MC NL PT SE

Title: SEMICONDUCTOR POWER PACK

Abstract: Source: US6060795A A power pack for providing power electronics at high temperature with high dI/dt, current, and voltage capability. The power pack having three layers. A top layer for providing: a matching composite Coefficient of Thermal Expansion (CTE) between power device materials and power electrodes, thermal cooling, and electrical conduction paths. The top layer may have interface circuitry for driving and controlling on-board power semiconductor devices. The top layer may also include traces and pads for the attachment of a gate, a gate return, and terminals. A middle layer may be a power semiconductor device providing control of the current flow. The bottom layer may be a rigid base plate for providing structural rigidity or may provide an electric and thermal path for the power semiconductor device. The power pack also includes a thermal shim which provides a thermal path to dissipate heat generated by the interface circuitry. The power pack may also include a snubber circuit.

Classifications:
International (IPC 8-9): H02M7/00 (Advanced/Invention);
H02M7/00 (Core/Invention)
International (IPC 1-7): H02J7/00
CPC: H02M7/003 H01L25/072 H01L25/162 H01L25/18 H01L23/367 H01L23/42 H01L24/01 H01L2924/13055
European: H02M7/00D
US: 257/680 307/150 361/688 361/717



Family:

Publication number	Publication date	Application number	Application date
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Priority:
US19980040112 19980318

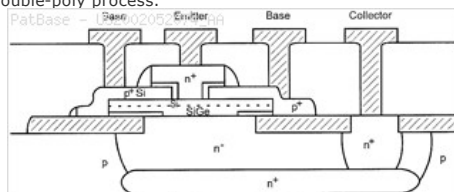
Probable Assignee: HARRIS CORP
Assignee(s): (std): INTERSIL CORP
Assignee(s): INTERSIL HOLDING CORP ; CREDIT SUISSE FIRST BOSTON AS COLLATERAL AGENT ; CREDIT SUISSE FIRST BOSTON COLLATERAL AGENT AS ; FAIRCHILD SEMICONDUCTOR CORP ; HARRIS CORP
Inventor(s): (std): ARTHUR STEVE ; AZOTEA JAMES K ; GLASCOCK HOMER

Title: Method of producing a Si-Ge base heterojunction bipolar device

Abstract: Source: US2002052074A A method of producing a bipolar transistor includes the step of providing a sacrificial mesa over a layer of SiGe in order to prevent a polysilicon covering layer from forming over a predetermined region of the SiGe layer forming the transistor base. After an etching process removes the sacrificial mesa and the SiGe layer is exposed, an oppositely doped material is applied over top of the SiGe layer to form an emitter. This makes it possible to realize a thin layer of silicon germanium to serve as the transistor base. This method prevents the base layer SiGe from being affected, as it otherwise would be using a conventional double-poly process.

Classifications:

International (IPC - 8): H01L21/331 H01L29/737 H03F1/02 H03F3/191 H03F3/72 H03G1/00 H03G3/30 H03J1/00 H03K19/013 H03K19/018 H03K5/003 H04B1/06 H04B1/18 H04B1/30 H04N5/455 H04N5/50 H04N5/63 (Advanced/Invention); H04N5/50 (Advanced/Non-invention); H01L21/02 H01L29/66 H03F1/02 H03F3/189 H03F3/72 H03G1/00 H03G3/30 H03J1/00 H03K19/01 H03K19/018 H03K5/003 H04B1/06 H04B1/18 H04B1/30 H04N5/50 H04N5/63 (Core/Invention); H04N5/50 (Core/Non-invention)



International (IPC-1 7C): C30B1/00 C30B19/00 H01L21/20 H01L21/331 H01L21/36 H01L21/822 H01L21/8238 H01L21/8249 H01L29/737 H01L29/76 H01Q11/12 H03F1/02 H03F1/30 H03F3/191 H03G3/10 H03G3/30 H03K19/018 H03K5/003 H03L5/00 H04B1/04 H04B1/06 H04B1/26 H04B7/00 H04L29/49 H04N5/50
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Family:

Publication number	Publication date	Application number	Application date
AT331338 E	20060715	AT20010810086T	20010130
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WO02093735 B1	20030403	WO2002CA00575	20020425

Priority:

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Probable Assignee: INTELLECTUAL VENTURES HOLDING 75 LLC

Assignee(s): (std): SIGE MICROSYSTEMS INC ; SIGE SEMICONDUCTOR INC ; ROGERS JOHN WILLIAM MITCHELL ; FOROUDI NAVID

Assignee(s): FAYYAZ NADER ; HOUGHTON DEREK C ; INTELLECTUAL VENTURES HOLDING 75 LLC ; KOVACIC STEPHEN J ; PEIRCE JOHN NM ; O CONNELL CORMAC M ; PEIRCE JOHN N M ; RAHN DAVID ; LAFONTAINE HUGUES ; MITCHELL ROGERS JOHN WILLIAM

Inventor(s): (std): FAYYAZ NADER ; FOROUDI NAVID ; FULGA STEFAN ; HOUGHTON DEREK C ; HOUGHTON DEREK J ; JULIEN MARQUIS CHRISTIAN ; KOVACIC STEPHEN J ; LAFONTAINE HUGUES ; MITCHELL ROGERS JOHN WILLIAM ; O CONNELL CORMAC M ; PEIRCE JOHN N M ; RAHN DAVID ; RAHN DAVID GEORGE ; ROBAR BRIAN ; ROGERS JOHN ; ROGERS JOHN WILLIAM MITCHELL ; TONER MICHAEL ; ZHOU ZHAN FENG

Inventor(s): PEIRCE JOHN NM : RAHN

Agent(s): TOWNSEND AND TOWNSEND AND CREW LLP; FREEDMAN AND ASSOCIATES; KENYON AND KENYON LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BV BZ CA CF CG CH CI CM CN CR CU CY CZ DE DK DM DZ EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KZ LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TI TM TR TT TZ UA UG US UZ VN YU ZA ZM ZW

Title: TRANSPONDER, INCLUDING TRANSPONDER SYSTEM

Abstract: Source: US2003137446A In a transponder (19) for amplification of a received signal (60) into an antenna (1), to a signal (61) for retransmission, and where the retransmitted signal (61) possibly may have information superimposed, a quenched oscillator (5) is incorporated as amplifying element. The oscillator (5) is preferably of superregenerative type and exhibits negative resistance (30) for the received signal (60). Transponders according to the present invention may be introduced as system elements in a wireless or wire based network to work as intelligent or unintelligent connections in the network. The transponders can also be used in positioning systems.

Classifications:

International (IPC 8-9): G01S1/04 G01S13/74 G01S13/76 G01S7/38 G06K19/07 H04B1/38 H04B1/59 H04B3/28 H04B3/36 H04B3/54 H04B3/58 H04B5/02 H04B7/14 (Advanced/Invention);

G01S13/87 H04B1/30 H04B1/59 H04L12/28 H04L12/56 (Advanced/Non-invention); G01S1/00 G01S13/00 H04B1/38 H04B1/59 H04B3/36 H04B3/54 H04B7/14 (Core/Invention);

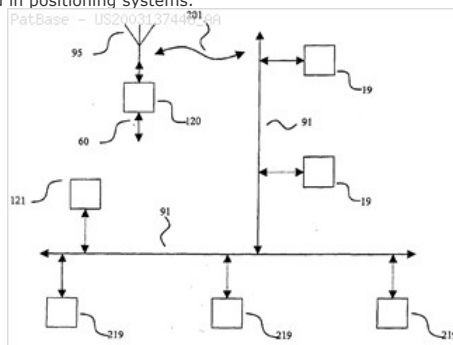
G01S H04B (Subclass/Invention)

International (IPC 1-7): G01S G01S13/74 G01S13/76 H04B H04B1/59 H04B3/36 H04B7/14

CPC: H04B7/155 G01S13/767 G01S13/878 G06K19/0723 H04B1/30 H04W28/06 H04W64/00 Y02B60/50 G01S7/4056 G01S2007/4095

European: G01S13/76R G06K19/07T H04B7/155 S01S13/87E T04B1/30 T04W28/04 T04W28/06 T04W64/00

US: 342/15 342/15S 342/175 342/175S 342/42 342/42S 342/51 342/51P 342/57 455/14 455/14P

**Family:**

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AU2001239588 AA	20010917	AU20010239588	20010301
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CA2472968 AA	20040708	CA20032472968	20030109
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CN1639994 A	20050713	CN20038005634	20030109
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US2009305628 AA	20091210	US20070915339	20071123
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Priority:

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AU20080261135 20081219	US20050199351 20050808	US20060492722 20060725

Probable Assignee: GEIR VAVIK**Assignee(s):** (std): MONSEN VAVIK GEIR ; VAVIK GEIR ; VAVIK GEIR MONSEN ; VAVIK GEIR M ; GEIR MONSEN VAVIK**Assignee(s):** GEIR VAVIK**Inventor(s):** (std): GEIR MONSEN VAVIK ; GM VAVIK ; MONSEN VAVIK GEIR ; VAVIK G M ; VAVIK GEIR MONSEN ; VAVIK GEIR M**Inventor(s):** G M VAVIK ; VAVIK GEIR**Agent(s):** LADAS AND PARRY LLP; GEIR MONSEN VAVIK

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SC SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: PLASMA REACTOR WITH OVERHEAD RF ELECTRODE TUNED TO THE PLASMA WITH ARCING SUPPRESSION

Abstract: Source: US2002108933A A plasma reactor for processing a semiconductor workpiece, includes a reactor chamber having a chamber wall and containing a workpiece support for holding the semiconductor workpiece, an overhead electrode overlying said workpiece support, the electrode comprising a portion of said chamber wall, an RF power generator for supplying power at a frequency of said generator to said overhead electrode and capable of maintaining a plasma within said chamber at a desired plasma ion density level. The overhead electrode has a capacitance such that said overhead electrode and the plasma formed in said chamber at said desired plasma ion density resonate together at an electrode-plasma resonant frequency, said frequency of said generator being at least near said electrode-plasma resonant frequency. The reactor further includes an insulating layer formed on a surface of said overhead electrode facing said workpiece support, a capacitive insulating layer between said RF power generator and said overhead electrode, and a metal foam layer overlying and contacting a surface of said overhead electrode that faces away from said workpiece support.

Classifications:

International (IPC 8-9): H05H1/00 B23K10/00 B23K10/06 B23K9/00 C03C15/00 C23C16/00 C23C16/455 C23C16/505 C23C16/509 C23C16/52 C23F1/00 G01L21/30 H01J27/16 H01J37/08 H01J37/32 H01J7/24 H01L21/00 H01L21/20 H01L21/205 H01L21/28 H01L21/285 H01L21/302 H01L21/306 H01L21/3065 H01L21/66 H01L27/02 H05H1/10 H05H1/30 H05H1/34 H05H1/40 H05H1/46 (Advanced/Invention); H01J37/32 H01J7/24 H01L21/3065 (Advanced/Non-invention); B23K10/00 B23K9/00 C23C16/00 C23C16/455 H01J27/16 H01J37/08 H01J37/32 H01J7/00 H01L21/02 H05H1/02 H05H1/26 H05H1/46 (Core/Invention)

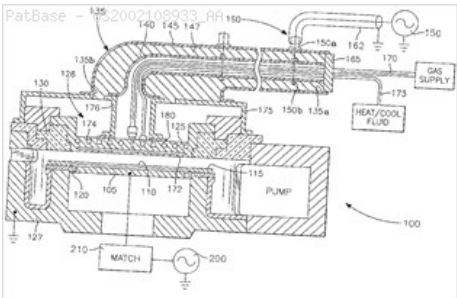
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CPC: H01J37/32082 H01J37/32091 H01J37/3244 H01J37/32623 H01J37/3266 H01J37/32174 H01J37/32183 H01L21/3116 H01L21/67069 H01L21/76807 H01L21/67253

European: H01J37/32D1C H01J37/32D2 H01J37/32H1 H01J37/32H1B H01J37/32M8 H01J37/32M8B H01J37/32M8J H01J37/32M8J2 H01J37/32O10 H01J37/32O2 H01J37/32O8 H01L21/311B2B H01L21/67S2D8D H01L21/67S8B T01J237/32D T01J237/32D10 T01J237/32D10B T01J237/32D6 T01J237/32S B T01J237/32C T01L21/768B2D
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Family:

Publication number	Publication date	Application number	Application date
CN100341107 C	20071003	CN20028025528	20020925
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Probable Assignee: APPLIED MATERIALS INC

Assignee(s): (std): APPLIED MATERIALS CO LTD ; APPLIED MATERIALS INC ; BARNES MICHAEL ; BUCHBERGER JR DOUGLAS A ; CHAE HEEYEOP ; ISHIKAWA TETSUYA ; YANG JANG G ; MILLER MATTHEW L ; YE YAN ; HOFFMAN DANIEL J ; YIN GERALD ZHEYAO ; LINDLEY ROGER A ; KUTNEY MICHAEL C ; TAVASSOLI HAMID F ; HORIOKA KEIJI ; SALINAS MARTIN J

Assignee(s): YANG JANG GYOO

Inventor(s): (std): BUCHBERGER DOUGLAS A ; BUCHBERGER DOUGLAS A JR ; BUCHBERGER DOUGLAS A JR HOFFMA ; BARNES MICHAEL ; BUCHBERGER JR DOUGLAS A ; BURNS DOUGLAS ; BURNS DOUGLAS H ; CARDUCCI JAMES ; CARDUCCI JAMES D ; CHAE HEE YEOP ; CHAE HEEYEOP ; CHAE HEEYOEP ; CHIANG KANG LIE ; DAN KATZ ; DELGADINO GERARDO A ; GOLD EZRA R ; GYOO YANG JANG ; HAGEN MELISSA ; HAGEN ROBERT B ; HAGEN ROBERT B DI ; HEEYOEP CHAE ; HOFFMAN DANIEL ; HOFFMAN DANIEL J ; GERARDO A DELGADINO ; HOFFMAN DANIEL J YE YAN KATZ D ; ISHIKAWA TETSUYA ; KANG LIE CHIANG ; KATZ DAN ; KEIJI HOFFMAN DANIEL J LINDLEY ; HORIOKA KEIJI ; KUTNEY MICHAEL C ; LINDLEY ROGER A ; MA SHAWMING ; MATTHEW L MILLER ; MELISSA YANG JANG GYOO HOFFMAN ; MICHAEL BARNES ; MILLER MATHEW L ; REGELMAN OLGA ; SALINAS MARTIN J ; SINHA ASHOK ; SUN JENNIFER Y ; TAVASSOLI HAMID F ; TETSUYA ISHIKAWA ; THACH SENH ; XIAOYE ZHAO ; YAN HOFFMAN DANIEL J YIN GERAL ; YAN YE ; YANG JANG G ; YANG JANG GYOO ; YE YAN ; YIN GERALD ZHEYAO ; ZHAO XIAOYE ; ZHEYAO YIN GERALD ; MILLER MATTHEW L

Inventor(s): OLGA REGELMAN ; YANG JANG GYOO HOFFMAN DANIEL J ; YANG JANG ; TAVASSOLI HAMID ; ROBERT B HAGEN ; SALINAS MARTIN ; MILLER MATTHEW ; MA SHAW MING ; LINDLEY ROGER ; KEIJI HORIOKA ; KUTNEY MICHAEL ; JAMES CARDUCCI ; JAMES D CARDUCCI ; JANG GYOO YANG ; HOFMAN DANIEL J ; GOLD EZRA ; HOFFMAN DANIEL J LINDLEY ROGER A KUTNEY ; HOFFMAN DANIEL J LINDLEY ROGER A KUTNEY MICHAEL C SALINAS MARTIN J TAVASSOLI HAMID F HORIOKA KEIJI BUCHBERGER DOUGLAS A JR ; HEEYEOP CHAE ; DOUGLAS A BUCHBERGER JR ; GERALD ZHEYAO YIN ; DANIEL J HOFFMAN ; DELGADINO GERARDO ; BARNES MICHAEL AND ; BUCHBERGER DOUGLAS ; BUCHBERGER DOUGLAS A JR HOFFMAN DANIEL J ; BUCHBERGER DOUGLAS AJR

Agent(s): ZIMMERMANN GERD HEINRICH ET AL; PATENT COUNSEL M S 2061 APPLIED MATERIALS INC; PATENT COUNSEL M S 2061 LEGAL AFFAIRS DEPT; MULCAHY ROBERT LAW OFFICE OF ROBERT W MULCAHY; AAGAARD AND BALZAN LLP; LAW OFFICE OF ROBERT M WALLACE; JOSEPH; BACH JOSEPH; WALLACE ROBERT M; ROBERT M; LAW OFFICE OF ROBERT WALLACE; BLAKELY SOKOLOFF TAYLOR AND ZAFMAN

Designated states: AL AT BA BE BG CH CN CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT JP KR LI LT LU LV MC MK NL PL PT RO SE SG SI SK TR YU

Title: Tissue resurfacing

Abstract: Source: US2001034519A A tissue resurfacing system has a handheld surgical instrument with a gas conduit (38) which terminates in an exit nozzle (180N). Inside the conduit is an inner electrode (54). A tubular coaxial outer electrode (70) constitutes part of the wall of the conduit. Coupled to the instrument is a radio frequency power generator which delivers high level radio frequency energy in single-shot or repeated bursts to the electrodes (54,70) while gas is flowing through the conduit (38) so as to create a gas plasma between the electrodes which then emerges from the nozzle (180N) for tissue treatment. A resonant focussing element (480) may be located in the conduit (38) between the electrodes (54,70) to aid plasma striking. The combination of high peak power (e.g. greater than 750 W) and short treatment pulses (e.g. less than 30 ms) allows rapid surface treatment without significant thermal effects at unwanted depths.

Classifications:

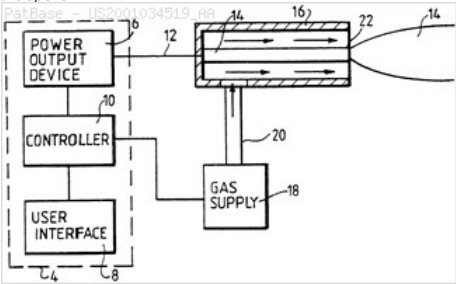
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European: A61B17/15 A61B18/00B A61B18/04 A61B18/04B A61B18/18 H05H1/24 K61B17/00C5 K61B17/00Q8 K61B17/00R2H K61B17/00R2R K61B17/00R2T K61B17/15K2 K61B17/15K4 K61B17/17B K61B17/32K K61B18/00F8 K61B18/00H4 K61B18/00N K61B18/00T K61B18/04B K61B18/14H K61B18/20F4 K61B18/22 K61B19/48D K61B19/54J K61B560/02H4 K61B560/04M

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Family:

Publication number	Publication date	Application number	Application date
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Probable Assignee: ENERGIST LTD

Assignee(s): (std): ANISSIAN LUCAS ; EN LTD ; GOBLE NIGEL MARK ; GYRUS MEDICAL LTD ; GOBLE COLIN CHARLES OWEN ; KREOS CAPITAL III UK LTD ; PENNY KEITH ; RHYTECH LTD ; RHYTEC LTD ; PLASMOGEN INC

Assignee(s): AMOAH FRANCIS ; RHYTEC LIMITED ; RHYTECH LIMITED ; HANCOCK CHRISTOPHER P ; GYRUS MECICAL LTD ; GYRUS GROUP PLC ; GYRUS MEDICAL LIMITED ; KREOS CAPITAL III LTD ; KREOS CAPITAL III (UK) LTD ; KREOS CAPITAL III UK LIMITED ; ENERGIST LIMITED ; ENERGIST LTD ; GOBLE COLIN C O

Inventor(s): (std): ANISSIAN LUCAS ; GOBLE COLIN CHARLES OWEN ; GOBLE NIGEL MARK ; NIGEL MARK GOBLE ; PENNY KEITH ; PENNY KEITH GOBLE NIGEL M ; WARD ROBERT M ; VARNEY KELVIN J ; JENKINS ANDREW E ; GOBLE COLIN C ; FERNIE DOUGLAS P ; AMOAH FRANCIS K ; AMOAH FRANCIS ; HANCOCK CHRISTOPHER P ; GOBLE NIGEL M ; GOBLE COLIN C O ; KEITH PENNY

Inventor(s): NIGEL M GOBLE ; GOBLE COLIN CO ; VARNEY KELVIN ; WARD ROBERT ; WARD ROBERT MARTIN ; JENKINS ANDREW ; GOBLE NIGEL ; COLIN CHARLES OWEN GOBLE ; FERNIE DOUGLAS ; GOBLE COLIN

Agent(s): GRIFFITH HACK; BLATCHFORD WILLIAM MICHAEL ET AL; BLATCHFORD WILLIAM MICHAEL; THOMPSON ANDREW JOHN; OLIFF AND BERRIDGE PLC; JOHN A FRANCZYK HUSSAN EGAN BENDERSKY AND FRANCZYK; R KEITH

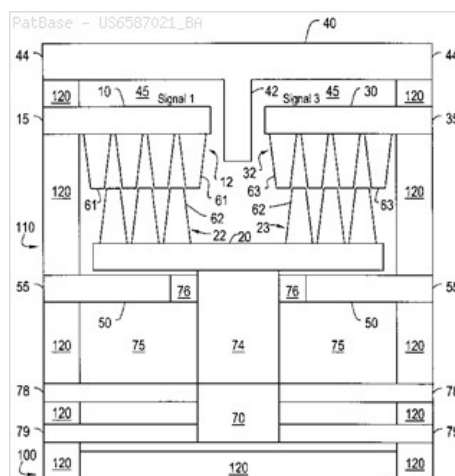
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Abstract: Source: US6587021B A MEM relay device includes a flexible multi-point contact system with a self-aligning structure. The inventive relay includes a first signal contact electrically connected to a first set of flexible electrically conductive signal teeth and a second signal contact electrically connected to a second set of flexible electrically conductive signal teeth. An actuator, selectively moves a shorting contact between an open and closed position. In the closed position, two sets of flexible electrically conductive shorting teeth mesh with a first set of flexible electrically conductive signal teeth and the second set of flexible electrically conductive signal teeth creating a conductive path between the two signal contacts. The contact structure facilitates fabrication using a deep reactive ion etch (DRIE) process and brings signal and actuator contacts to an edge of each die.

International (IPC 8-9): H01H1/00 H01H1/06 H01H50/10 H01H50/54 H01H57/00 H01H59/00 (Advanced/Invention);
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H01H1/06 (Core/Non-invention)

European: H01H1/00M T01H1/00M6 T01H1/06 T01H1/20 T01H1/32 T01H1/66 T01H9/40

US: 200/181 333/105 333/262 335/78



Publication number	Publication date	Application number	Application date
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Assignee(s): (std): RAYTHEON CO : RAYTHEON COMPANY WALTHAM

Assignee(s): RAYTHEON COMPANY

Inventor(s): (std): STREETER D ; STREETER ROBERT D

Inventor(s): ROBERT D STREETER ; STREETER RICHARD D

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PH PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

Title: SERIES ARC FAULT DIAGNOSTIC FOR AIRCRAFT WIRING

Abstract: Source: US2002097056A A device for measuring the AC voltage drop across a series of connections under load with no direct electrical contact to the conductors. The presence of a substantial resistance at series contacts is indicative of a series arcing fault. The device comprises a capacitive probe for clamping to the outer insulation layer of the wire to sense a first voltage at a first node. The device further comprises a floating high-impedance meter having a ground reference coupled to the source of common-mode voltage at a second node, the floating high-impedance meter being adapted to measure a voltage difference between the two nodes and being further adapted to indicate the presence of the series fault when the measured voltage exceeds a predetermined level.

Classifications:

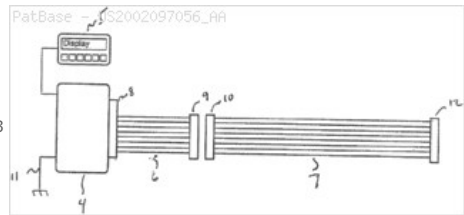
International (IPC 8-9): G01R1/07 G01R15/16 G01R31/11 (Advanced/Invention); G01R1/067 G01R15/14 G01R31/08 (Core/Invention)

International (IPC 1-7): G01R31/02 G01R31/08 G01R31/12 G01R31/28 H01H31/02 H01H9/50

CPC: G01R1/07 G01R15/16 G01R31/11 G01R31/008 G01R31/1272 G01R1/06788

European: G01R1/067P G01R1/07 G01R15/16 G01R31/11 G01R31/12F5B S01R31/00T3

US: 324/523 324/530 324/532 324/535 324/536 324/536P 324/539 324/540 324/541 324/544



Family:

Publication number	Publication date	Application number	Application date
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Priority:

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Probable Assignee: ASTRONICS ADVANCED ELECTRONIC SYSTEMS CORP

Assignee(s): (std): GEN DYNAMICS OTC AEROSPACE INC ; GEN DYNAMICS OTS AEROSPACE INC ; ASTRONICS ADVANCED ELECTRONIC

Assignee(s): ASTRONICS ADVANCED ELECTRONIC SYSTEMS CORP ; BLADES FREDERICK K ; GENERAL DYNAMICS OTC AEROSPACE INC ; GENERAL DYNAMICS OTS (AEROSPACE) INC ; GENERAL DYNAMICS OTS (AEROSPACE) INC A CORP OF WASHINGTON ; GENERAL DYNAMICS OTS AEROSPACE INC ; GENERAL DYNAMICS OTS AEROSPACE INC A CORP OF WASHINGTON ; GENERAL DYNAMICS OTS INC

Inventor(s): (std): BLADES FREDERICK K

Agent(s): HOWREY SIMON ARNOLD AND WHITE LLP; WIGGIN AND DANA LLP; ROSENBLATT GREGORY S; GALLETTA ELIZABETH A; ELIZABETH A; GREGORY S

Title: BIOCHIPS INCLUDING ION TRANSPORT DETECTING STRUCUTRES AND METHODS OF USE

Abstract: Source: US2002182627A The present invention recognizes that the determination of ion transport function or property using direct detection methods, such as patch-clamps, whole cell recording or single channel recording, are preferable to methods that utilize indirect detection methods, such as FRET based detection system. The present invention provides biochips and methods of use that allow for the direct analysis of ion transport function or property using microfabricated structures that can allow for automated detection of ion transport function or property. These biochips and methods of use thereof are particularly appropriate for automating the detection of ion transport function or property, particularly for screening purposes.

Classifications:

International (IPC 8-9): B01D57/02 B01D59/42 B01D59/50 B01D61/42 B01D61/58 B01L3/00 B03C5/02 B23K26/38 B23K26/40 B29C45/14 B65B31/00 C02F1/469 C07H21/04 C07K14/26 C07K14/47 C08F2/58 C12M1/34 C12M3/00 C12N9/34 C12Q1/00 C12Q1/68 C12Q1/70 C25B15/00 C25B7/00 G01F1/64 G01L1/20 G01L9/18 G01N1/00 G01N1/28 G01N13/02 G01N15/06 G01N15/10 G01N27/26 G01N27/447 G01N31/22 G01N33/487 G01N33/50 G01N33/53 G01N33/543 G01N33/567 G01N33/68 G01N37/00 G01R19/00 H01L21/00 H04B1/38 H04B7/00 H04B7/216 H04L12/28 H04M1/80 H04M7/20 H04Q7/00 H04Q7/20 H04Q7/24 H04W4/00 H04W84/02 (Advanced/Invention); B01L3/00 B01L3/02 B03C5/02 B81B1/00 C23C16/452 G01N15/06 G01N15/10 (Advanced/Non-invention); B01L3/00 B03C5/00 B23K26/00 B29C45/14 C07H21/00 C12M1/34 C12Q1/00 C12Q1/68 C12Q1/70 G01N1/00 G01N1/28 G01N13/00 G01N15/06 G01N15/10 G01N27/447 G01N33/487 G01N33/50 G01N33/567 G01N33/68 G01N37/00 H01L21/00 H04B7/204 H04L12/28 H04M1/80 H04Q7/00 H04Q7/20 H04Q7/24 (Core/Invention); B81B1/00 (Core/Non-invention); C12Q (Subclass/Invention)

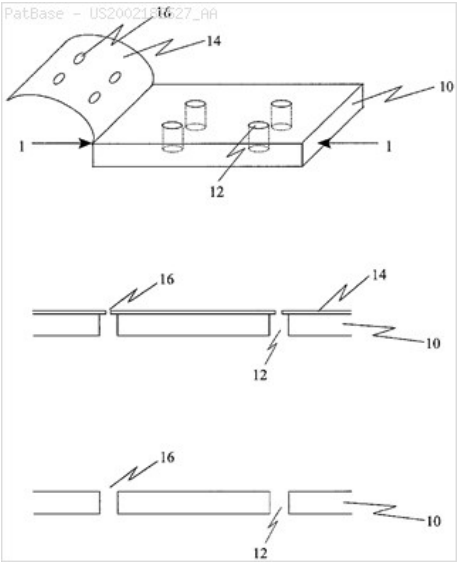
International (IPC 1-7): B01D57/02 B01D59/42 B01D59/50 B01D61/42 B01D61/58 B03C5/02 C02F1/469 C07K1/26 C08F2/58 C12M1/34 C12N9/34 C12Q1/00 C12Q1/68 C12Q1/70 C25B15/00 C25B7/00 G01F1/64 G01L1/20 G01L9/18 G01N15/06 G01N15/10 G01N27/26 G01N33/487 G01N33/53 G01N33/542 G01N33/567 H01L21/00 **CP:** B01L3/0268 B01L3/5027 B01L3/5088 B01L2300/0645 B01L2300/0816 B01L2300/0874 B01L2400/086 G01N33/5005 G01N33/5438 G01N33/6872 B01L3/50273 B01L2200/027 B01L2200/0668 B01L2300/0627 B01L2300/0819 B01L2300/089 B01L2400/0415 B01L2400/0418 B01L2400/0421 B01L2400/043 B01L2400/0436 B01L2400/0457 B01L2400/049 B01L2200/06 B03C5/026 B03C5/028 C12Q1/6869 G01N15/1031 G01R19/0061 G01N33/54366 B01L2200/0647 H04W84/14 H04L12/403 G01N31/22 B65B31/00 C12Q2565/629 C23C16/452 H01J2237/3142 G01N33/48728 B01L3/50276 B01L3/50279 B01L3/502761 B01L3/502792

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Family:

Publication number	Publication date	Application number	Application date
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Priority:

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Probable Assignee: BELAIR NETWORKS INC

Assignee(s): (std): AVIVA BIOSCIENCES CORP ; BELAIR NETWORK INC ; GUIA ANTONIO ; HUANG MINGXIAN ; BELAIR NETWORKS INC ; ROTHWART DAVID ; SITHIPHONG KHACHONESIN ; SPASSOVA MARIA ; KHACHONESIN SITHIPHONG ; MENIKH ABDELLEH ; MENIKH ABDELLAH ; SMITH MARK JEFFREY ; WANG XIAOBO ; XU JIA ; WU LEI ; TAO HUIMIN ; WALKER GEORGE ; TAO GUOLIANG ; ZOZULYA ZOYA ; YUAN JULIAN ; SAYA STEVEN ; WALKER GLENN

Assignee(s): COMERICA BANK A TEXAS BANKING ASSOCIATION AND AUTH ; LOWE JOHN PATRICK TRUSTEE CHAPTER 7 CASE NO 05 55935 C IN UNITED STATES BANKRUPTCY COURT FOR WESTERN DISTRICT OF TEXAS SAN ANTONIO DIVISION ; LOWE JOHN PATRICK TRUSTEE CHAPTER 7 CASE NO 05 55938 C IN UNITED STATES BANKRUPTCY COURT FOR WESTERN DISTRICT OF TEXAS SAN ANTONIO DIVISION ; JOHN PATRICK LOWE TRUSTEE CHAPTER 7 CASE NO 05 55938 C IN UNITED STATES BANKRUPTCY COURT FOR WESTERN DISTRICT OF TEXAS SAN ANTONIO DIVISION ; LOWE JOHN PATRICK ; AVIVA BIOSCIENCE CORP ; YANG WEIPING ; XU JUN QUAN ; XU JUNQUAN ; JOHN PATRICK LOWE TRUSTEE CHAPTER ; LOWE JOHN PATRICK TRUSTEE CHAPTER ; OXFORD FINANCE CORP ; LOWE JOHN PATRICK TRUSTEE CHAPTER 7 CASE NO 05 559 ; JOHN PATRICK LOWE TRUSTEE CHAPTER 7 CASE NO 05 559 ; SMITH MARK J ; COMERICA BANK A TEXAS BANKING ASSOCIATION AND AUTHORIZED FOREIGN BANK UNDER BANK ACT CANADA ; COMERICA BANK A TEXAS BANKING ASSOCIATION AND AUTHORIZED FOREIGN BANK UNDER BANK ACT (CANADA) ; ERICSSON WIFI INC ; HUANG MING XIANG ; CHENG JING ; BELAIR NETWORKS CORP

Inventor(s): (std): GUIA ANTONIO ; HUANG MING XIANG ; HUANG MINGXIAN ; CHENG JING ; KHACHONESIN SITHIPHONG ; ROTHWART DAVID ; SAYA STEVEN ; SITHIPHONG KHACHONESIN ; SMITH MARK JEFFREY ; SPASSOVA MARIA ; TAO GUOLIANG ; TAO HUIMIN ; WALKER GEORGE ; WALKER GEORGES ; WALKER GLENN ; WANG XIAOBO ; MENIKH ABDELLAH ; MENIKH ABDELLEH ; XU JIA ; XU JUN QUAN ; XU JUNQUAN ; YANG WEIPING ; YUAN JULIAN ; ZOZULYA ZOYA ; WU LEI

Inventor(s): XIAOBO WANG ; ANTONIO GUIA ; MINGXIAN HUANG ; WEIPING YANG ; LEI WU ; DAVID ROTHWART ; JIA XU ; JING CHENG ; JUNQUAN XU

Agent(s): RIDOUT AND MAYBEE LLP; FETHERSTONHAUGH AND CO; LAUFER GABRIELE ET AL; DAVID R PRESTON AND ASSOCIATES; DAVID R PRESTON AND ASSOCIATES APC; MORRISON AND FOERSTER LLP; WENDY K; BUSKOP LAW GROUP PC; BUSKOP WENDY; WENDY; KATTEN MUCHIN ROSENMAN LLP; MORRISON AND FOERSER LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: COMBINATORIAL OPTICAL PROCESSOR

Abstract: Source: US2002158866A A Combinatorial Optical Processor and method for the architecture of optical systems utilizes one or more optical modules, each module including a number of individually addressable optical elements. The optical elements are arranged and addressed in a combinatorial-arithmetic fashion such that a set of optical filter functions are defined, and can be performed, by the optical modules. The number of optical filter functions may be an exponential function of the number of addressable optical elements. Additionally, each of the optical filter functions may be addressed at random and a plurality of such functions may be addressed simultaneously. Apparatus, such as imaging systems, may employ the Combinatorial Optical Processor in order to include without limitation the features of being solid-state, projection of images into free space and random addressability of the filter functions of the system. Combinatorial optical processing principles may be implemented as a method of optical digital to analog conversion. A free-space randomly-addressable interactive three-dimensional display system based on the Combinatorial Optical Processor is also described.

Classifications:

International (IPC 8-9): A61K31/41 A61K31/44 A61K31/444 A61K31/4725 A61P1/00 A61P35/00 B29D11/00 C07D207/00 C07D211/00 C07D401/14 G02B1/06 G02B23/14 G02B26/00 G02B26/02 G02B3/12 G02B3/14 G02B5/32 G02B7/04 G02B7/09 G02F1/00 G02F1/29 G02F3/00 G03B13/02 G03B13/10 G03B13/32 G03B3/00 G03B3/02 G03B3/10 G03H1/02 G06E3/00 G06F3/041 G06T15/00 H04N13/00 H04N5/232 H04N7/18 (Advanced/Invention);

G02B3/14 (Advanced/Non-invention);

A61K31/4427 A61K31/472 A61P1/00 A61P35/00 B29D11/00 C07D401/00 G02B1/00

G02B3/12 G03B13/32 G03B3/00 (Core/Invention);

G02B G06T (Subclass/Invention)

International (IPC 1-7): G02B5/32 G03H1/02 G06T15/00

CPC: G02B5/1876 G02B5/32 G02F1/1347 G02F1/29 G02F2001/294 G02B7/04

C07D213/20 C07D213/30 C07D217/10 C07D401/14 G02B3/12 G02B5/20 G02B26/004

H04N13/0404 H04N13/0488 H04N13/0495 G02B1/041 G02B3/14 G02B26/005

European: C07D213/20 C07D213/30 C07D217/10 C07D401/14 G02B26/00L

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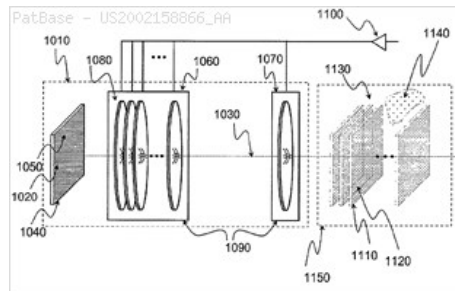
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359/3P 359/432 359/432S 359/665 359/665P 359/665S 359/666 359/666P 359/694 359/694S 396/373 396/378 514/308 514/332 514/333

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**Family:**

Publication number	Publication date	Application number	Application date
EP2153252 A1	20100217	EP20080747869	20080508
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Priority:

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Probable Assignee: HOLOCHIP CORORATION

Assignee(s): (std): UNIV KENTUCKY RES FOUND ; HOLOCHIP CORP ; MANSELL JUSTIN D ; SZILAGYI ANDREI ; MANSELL JUSTIN ; ROBINSON SAMUEL T ; PIVAVARCHYK MARHARYTA ; ZHANG ZHENFA ; BATCHKO ROBERT ; BATCHKO ROBERT G ; CRABTREE IV ALLEN F ; CROOKS PETER A ; DWOSKIN LINDA P ; HOLOCHIP CORORATION

Assignee(s): OF KENTUCKY RESEARCH FOUNDATION UNIV

Inventor(s): (std): CRABTREE IV ALLEN F ; CROOKS PETER A ; DWOSKIN LINDA P ; MANSELL JUSTIN ; MANSELL JUSTIN D ; PIVAVARCHYK MARHARYTA ; ROBINSON SAMUEL T ; SZILAGYI ANDREI ; ZHANG ZHENFA ; BATCHKO ROBERT ; BATCHKO ROBERT G ; CRABTREE ALLEN F ; CRABTREE ALLEN F IV

Inventor(s): CRABTREE ALLEN FIV ; CRABTREE ALLEN

Agent(s): BOYCE CONOR; JOSHUA D ISENBURG; JOSHUA D ISENBURG JDI PATENT; CROWELL AND MORING LLP,INTELLECTUAL PROPERTY GROUP; CROWELL AND MORING LLP INTELLECTUAL PROPERTY GROUP; JDI PATENT; JOSHUA D; CROWELL AND MORING LLP; ISENBURG JOSHUA D

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: DIRECT-CONNECT SIGNALING SYSTEM

Abstract: Source: US2003222282A A direct-connect signaling system including a printed circuit board and first and second integrated circuit packages disposed on the printed circuit board. A plurality of electric signal conductors extend between the first and second integrated circuit packages suspended above the printed circuit board.

Classifications:

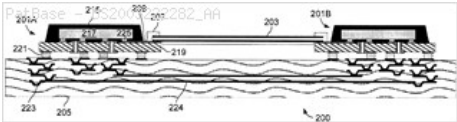
International (IPC 8-9): H01L23/12 H01L23/28 H01L23/495 H01L23/498 H01L23/52 H01L31/0336 H01R12/00 H04B15/00 H05B3/00 H05K1/00 H05K1/14 H05K1/18 H05K3/22 (Advanced/Invention); H01L23/48 H01L31/0264 (Core/Invention)

International (IPC 1-7): H01L21/00 H01L23/28 H01L23/52 H01L31/0336 H04B15/00 H05B3/00

CPC: H01L24/49 H01L23/49816 H01L23/49833 H01L23/4985 H01L2224/48227 H01L2224/48465 H01L2224/49109 H01L2924/09701 H01L2924/15173 H01L2924/1532 H01L2224/16225 H05K2201/10378 H05K1/147 H01L23/49805 H01L24/16 H01L24/48 H01L2224/16 H01L2224/48091 H01L2224/48247 H01L2224/48463 H01L2224/73253 H01L2924/01079 H01L2924/14 H01L2924/15311 H01L2924/30105 H01L2924/3011 H01L2924/3025 H05K1/0228 H05K1/0237 H05K3/222 H05K2201/10356 H05K2201/1053 H05K2201/10734 H01L2224/32245 H01L2224/73265 H01L2924/30107 H01L2224/32225 H01L2224/73204

European: H01L23/498A H01L23/498F H01L23/498J H05K1/14F H05K3/22A T01L224/16 T01L224/48091 T01L224/48227 T01L224/48247 T01L224/48463 T01L224/48465 T01L224/49109 T01L224/73253 T01L23/498A T01L23/498C4 T01L24/16 T01L24/48 T01L924/01079 T01L924/14000 T01L924/15173 T01L924/15311 T01L924/15320 T01L924/30105 T01L924/30110 T01L924/30250 T05K1/02C2C T05K1/02C4 T05K201/10B17 T05K201/10C2C T05K201/10D10

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Family:

Publication number	Publication date	Application number	Application date
AU2003223783 AA	20031117	AU20030223783	20030429
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JP2010192918 A2	20100902	JP20100089212	20100408
JP5437137 B2	20140312	JP20100089212	20100408
US2003222282 AA	20031204	US20030426930	20030429
US2006091507 AA	20060504	US20050182484	20050714
US7307293 BB	20071211	US20030426930	20030429
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WO03094203 A3	20040108	WO2003US13524	20030429

Priority:

US20020376482P	20020429	US20020400180P	20020731	JP20040502330	20030429
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US20030426930	20030429				

Probable Assignee: SAMSUNG ELECTRONICS CO LTD

Assignee(s): (std): INTERCONNECT PORTFOLIO LLC ; FJELSTAD JOSEPH C ; GRUNDY KEVIN P ; SAMSUNG ELECTRONICS CO LTD ; SILICON PIPE INC ; YASUMURA GARY

Assignee(s): SECURE NOTE HOLDERS DAN ANDERSON JOSEPH FJELSTAD KEVIN GRUNDY LAURANCE GRUNDY MATT STEPOVICH ; TECHNOLOGY PROPERTIES LTD ; TECHNOLOGY PROPERTIES LLC LTD ; SEGARAM PARA K ; SECURE NOTE HOLDERS DAN ANDERSON JOSEPH FJELSTAD K ; HABA BELGACEM ; NOVIAS LLC ; SAMSUNG ELECTRONICS CO

Inventor(s): (std): BELGACEM HABA ; FJELSTAD JOSEPH C ; GRUNDY KEVIN P ; HABA BELGACEM ; SEGARAM PARA K ; YASUMURA GARY

Inventor(s): JOSEPH C FJELSTAD ; PARA K SEGARAM ; GRUNDY KEVIN ; FJELSTAD JOSEPH

Agent(s): SHEMWELL MAHAMED I LLP; RONALD R

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW

Title: TUBULAR ELECTRO-LUMINESCENT PANEL(S) LIGHT DEVICE

Abstract: Source: US2003231485A A tubular Electro-Luminescent panel(s) light device offer a desired bending directions with super brightness basing on certain width of panel incorporated proper inverter system. The said panel(s) with much narrow width than tube means to allow the panel(s) can be bend at any direction and angle within the tube means to offer a desired light effects. The said panel(s) can be flat or twisted within the tube means which may have the desired colored, transparency, wall thickness, diameter, shape, length for requirement. The said device may incorporated with non-elastic means, magnetic means, tube holder, sensor means, Integrated circuit to add a lot of desired variety features.

Classifications:

International (IPC 8-9): A41D27/08 A42B1/24 A43B3/00 A45C15/06 B60Q1/26 B60Q3/02 B60R11/00 B60R13/00 F21K2/00 F21K99/00 F21L14/00 F21L4/00 F21L4/08 F21S10/00 F21S10/06 F21S2/00 F21S4/00 F21S6/00 F21S8/00 F21S8/08 F21S9/02 F21V1/00 F21V1/10 F21V11/00 F21V13/00 F21V14/00 F21V14/02 F21V15/01 F21V17/00 F21V17/02 F21V19/00 F21V19/02 F21V21/00 F21V21/005 F21V21/08 F21V21/14 F21V21/26 F21V21/30 F21V23/00 F21V23/02 F21V23/04 F21V23/06 F21V29/00 F21V29/70 F21V3/00 F21V3/02 F21V33/00 F21V5/04 F21V7/00 F21V7/04 F21V8/00 F21V9/00 F21V9/16 G01S3/786 G02B27/22 G02F1/13 G02F1/1335 G02F1/13357 G03B1/00 G03B15/03 G03B19/18 G03B21/00 G03B21/14 G03B21/20 G03B23/00 G03B3/00 G03H1/22 G04B19/04 G04B19/30 G04B37/12 G04B47/00 G04C10/00 G04C19/00 G06F1/26 G06T7/00 G09F13/22 G09F23/00 G09F9/33 H01L21/00 H01L21/68 H01R11/00 H01R13/66 H01R25/00 H01R27/00 H01R3/00 H01R33/00 H01R33/009 H01R39/00 H02G3/14 H02J4/00 H02J7/00 H02M1/00 H04N5/225 H04N5/232 H04N5/247 H04N5/33 H04N7/18 H04N9/31 H05B33/08 H05B37/02 H05B41/30 (Advanced/Invention); B60R13/02 F21S2/00 F21V21/22 F21V21/29 F21V21/30 F21V23/04 F21V33/00 F21V8/00 F21V9/08 F21W121/00 F21Y101/02 G02B5/32 H01H9/18 H01J7/44 H01R103/00 H01R13/713 H01R24/76 (Advanced/Non-invention); A42B1/00 A43B3/00 A45C15/00 B60Q3/00 B60R11/00 B60R13/00 F21L4/00 F21S4/00 F21V1/00 F21V17/00 F21V21/00 F21V21/005 F21V21/08 F21V21/14 F21V23/00 F21V23/04 F21V3/00 F21V33/00 G03B21/00 G03B21/14 G09F13/22 H01R3/00 H01R33/00 H05B37/02 (Core/Invention); B60R13/02 G02B5/32 (Core/Non-invention)

International (IPC 1-7): F21V21/00 F21V21/08 F21V9/16 G02B6/04 H01R11/00

CPC: A42B1/242 A41D27/085 A42B1/244 A43B1/0036 A43B3/0005 A43B3/001 A45C15/06 B60Q1/26 B60Q3/0289 F21S2/00 F21S4/001 F21S4/003 F21W21/31/109 F21Y2105/00 G09F13/22 H04N7/181 F21S2/005 F21S4/008 F21S8/035 F21S8/038 F21S9/022 F21S10/002 F21V9/08 F21V14/02 F21V21/08 F21V21/14 F21V21/22 F21V21/29 F21V21/30 F21V23/04 F21V23/0442 F21V23/0492 F21V29/00 F21V33/0052 F21W2121/00 F21Y101/02 G01S3/7864 H04N5/2252 H04N5/23241 Y02B10/30 Y10S362/80 H05B33/0803 F21S10/06 F21V1/10 G09F9/33 G09F19/12 H05B37/0245 F21V9/00 F21V19/0015 F21V19/003 G03B15/03 H05B37/0218 H05B37/0236 Y02B20/42 F21V23/00 F21S9/02 F21S10/007 F21V5/04 F21V14/003 F21V14/006 F21V17/02 F21V23/0471 G02F1/1313 G03B21/142 G03B21/2046 G03B23/00 F21K9/30 F21S6/003 F21V15/01 F21V23/02 F21V23/023 F21V33/00 F21V33/0004 F21V33/0024 F21V33/0048 F21V33/0056 F21V33/006 G02B6/0021 G02B6/0045 G04B19/30 G09F23/00 H01H2009/186 H01R13/6691 H01R13/713 H01R24/76 H01R25/006 H01R2103/00 H02G3/14 H02J4/00 H02J7/0042 H02J7/0052 H02J7/007 H01R33/09 A61L9/03 A61L2209/12 F21K9/135 Y10S362/806 A43D999/00 B60R11/00 B60R13/00 B60R2011/0063 B60R2013/0287 A41G1/005 G02B6/0008 G02B6/001 G02B27/22 G03B21/00 G03B35/24 F21S10/00 F21V9/00 F21V9/12 F21Y2103/00 F21Y2103/025 F21Y2111/00 H04M1/05 H04M1/6058 F21S10/066 F21V3/023 F21V23/005 F21V23/0407 H05B33/0857 A43C9/02 F21V3/02 F21K9/13 F21K9/50 F21K9/58 F21V29/20 F21W2131/30 F21V23/008 F21V19/02 F21V1/00 F21V3/00 H01R33/06 F21V23/045 F21V5/048 F21V7/0066 F21V29/70 G03B21/20 G03B21/2086 G06F1/266 F21V23/06 Y10T307/406 H04N5/2256 H04N5/2258 H04N5/247 G06T7/004 G06T2207/30232

European: A41D27/08B A41G1/00B8 A42B1/24B A43B1/00C10 A43B3/00E A43B3/00E10 A43D999/00 A45C15/06 A61L9/03 B60Q1/26 B60Q3/02Q B60R11/00 B60R13/00 F21K9/00 F21K9/135 F21S10/00 F21S10/00A F21S2/00 F21S4/00E F21S4/00L F21S4/00L6 F21S8/03G1 F21S8/03T F21S9/02 F21S9/02E F21V14/02 F21V21/08 F21V21/14 F21V23/00 F21V29/00 F21V33/00A F21V9/00 F21V9/08 F21V9/12 G02B27/22 G02B6/00L4E G02B6/00L4L G02B6/00L604S G03B21/00 G03B21/20 G03B35/24 G09F13/22 G09F19/12 G09F23/00 G09F9/33 H01R13/66D10 H01R25/00D H01R33/06 H01R33/09 H02G3/14 H04M1/05 H04M1/6072B H05B33/08D K61L209/120 L60R11/00R4A15 L60R13/02R R21S10/06 R21S2/00A R21S8/03G1 R21V1/10 R21V21/22 R21V21/29 R21V21/30 R21V23/04S R21V23/04S8 R21V33/00B R21V9/08 R21W121/00 R21W131/109 R21Y101/02 R21Y103/00 R21Y103/025 R21Y105/00 R21Y111/00 S02B6/00L614S4 T01H9/18E T01R103/00 T01R13/66D10 T01R13/713 T01R24/76 Y02B10/30

US: 307/31 313/498 313/511 313/512 315/155 315/160 315/250 315/287 315/314 315/317 315/32 315/86 340/472 348/142 348/143 348/151 348/159 348/169 348/207.1 348/372 348/373 348/744 348/E5.024 348/E5.026 348/E5.043 348/E5.09 348/E7.085 348/E9.025 349/5 349/62 352/133 353/10 353/101 353/103 353/119 353/122 353/43 353/7 353/85 353/87 353/95 359/15 359/32 362/101 362/103 362/104 362/108 362/109 362/145 362/149 362/157 362/183 362/184 362/20 362/219 362/221 362/225 362/23 362/23.01 362/23.19 362/231 362/234 362/235 362/238 362/241 362/249 362/249.01 362/249.02 362/249.03 362/249.06 362/249.07 362/249.09 362/249.11 362/249.12 362/250 362/251 362/253 362/257 362/267 362/269 362/276 362/277 362/280 362/281 362/285 362/294 362/295 362/298 362/3 362/311 362/311.01 362/311.02 362/311.03 362/311.13 362/318 362/34 362/362 362/362 362/362 362/375 362/382 362/390 362/392 362/397 362/404 362/421 362/427 362/457 362/487 362/555 362/562 362/565 362/603 362/640 362/641 362/642 362/643 362/644 362/645 362/646 362/647 362/648 362/659 362/8 362/802 362/806 362/84 362/85 362/86 362/87 362/88 362/92 362/95 362/96 363/178 368/10 368/223 368/227 368/242 368/278 368/67 368/80 368/82 368/84 396/155 439/11 439/131 439/165 439/31 439/490 439/502 439/536 439/6 439/638 439/8 713/300

**Family:**

Publication number	Publication date	Application number	Application date
US2003231485 AA	20031218	US20020170584	20020614
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Probable Assignee: TORMACH LLC

Assignee(s): (std): CHIEN TAENG LU ; CHIEN TSENG L ; CHIEN TSENG LU ; TORMACH LLC

Inventor(s): (std): CHIEN TSENG LU ; CHIEN TSENG L ; CHIEN TAENG LU

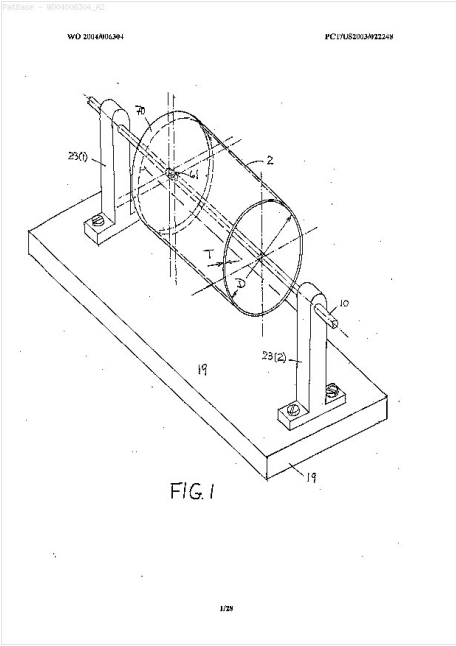
Inventor(s): CHIEN TSENG

Agent(s): BACON AND THOMAS PLLC; ROBERT

Title: MULTIPOLAR MACHINES

Abstract: A new type of homopolar machine wherein a "current channeling" rotor of high lengthwise electrical conductivity but essentially insulating in circumferential direction, rotates between cylindrically aligned parallel magnet poles of alternating polarity. These generate strip-shaped "zones" in the rotor wall that are penetrated by radial magnetic fields of alternating orientation. Currents passing to and fro along the zones are constrained by the current channeling and are conducted from zone to zone by means of electrical brushes on slip rings at either rotor end. Thereby several to many current "turns" are possible in any one rotor, in all of which the Lorentz force has the same angular orientation. Additionally two or more electrically insulating but mechanically fused concentric rotors may be used for additional current "turns". As a result high voltages are possible even at modest speeds. Multipolar machines may be used as motors, generators, transformers, electric heaters, and optionally simultaneously in any combination.

Classifications:
International (IPC 8-9): H01R39/24 H02K31/02 (Advanced/Invention);
H01R39/00 H02K31/00 (Core/Invention)
International (IPC 1-7): H01L H01M H02K13/00 H02K21/00 H02K21/26 H02K31/00 H02K39/00
CPC: H01R39/24 H02K31/02
European: H01R39/24 H02K31/02



Family:

Publication number	Publication date	Application number	Application date
AU2003247921 AA	20040123	AU20030247921	20030708
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WO04006304 A2	20040115	WO2003US22248	20030708
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Priority:
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Probable Assignee: KUHLMANN WILSDORF DORIS
Assignee(s): (std): KUHLMANN WILSDORF DORIS
Inventor(s): (std): DORIS KUHLMANN WILSDORF ; KUHLMANN WILSDORF DORIS
Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: MULTI-INTERFACE COMPACT PERSONAL TOKEN APPARATUS AND METHODS OF USE

Abstract: Source: US2005109841A A compact personal token apparatus, suitably resembling a conventional USB memory fob in size, shape, and form which can be plugged into a PC and interfaced with the virtual world of the Internet. The apparatus is capable of loading and storing information from the Internet, via the PC to its flash memory or EEPROM and then using the stored information or value via its wireless interface in the real world. The apparatus is capable of implementing an auto-run application, when inserted into a personal computer. The apparatus is capable of exchanging information with other devices having compatible interfaces. The apparatus can also function as a firewall when plugged between an Internet connection and a PC.

Classifications:

International (IPC 8-9): B05D3/06 B23K26/36 B23P19/00 B32B27/00 B32B3/24 B32B37/02 B32B37/12 B32B38/10 B32B5/02 B42D15/00 B42D25/305 G01V15/00 G06F13/38 G06F15/16 G06F17/11 G06K19/00 G06K19/02 G06K19/06 G06K19/067 G06K19/07 G06K19/073 G06K19/077 G06K5/00 G06K7/00 G06K7/01 G06K7/06 G06K7/08 G06K7/10 G06Q20/00 G06Q40/00 G08B13/14 H01F38/14 H01F41/04 H01L21/263 H01L21/44 H01L21/58 H01L23/00 H01L23/02 H01L23/12 H01L23/48 H01L23/488 H01P11/00 H01Q1/22 H01Q1/24 H01Q1/36 H01Q1/38 H01Q1/40 H01Q1/52 H01Q11/12 H01Q13/00 H01Q17/00 H01Q21/29 H01Q3/44 H01Q7/00 H01Q7/06 H01R13/44 H01R4/00 H01R43/00 H01S4/00 H04B5/00 H04H1/00 H04H6/63 H04H60/74 H04L29/06 H05K1/02 H05K1/11 H05K3/04 H05K3/00 H05K3/10 H05K3/30 H05K3/46 H05K7/02 (Advanced/Invention); H01F38/14 H04H20/93 H04H60/37 H05K1/02 (Advanced/Non-invention); B32B27/00 B32B37/02 B42D15/00 G01V15/00 G06F13/38 G06F15/16 G06K19/02 G06K19/06 G06K19/07 G06K19/073 G06K19/077 G06K5/00 G06K7/08 G06Q20/00 G08B13/14 H01F41/04 H01L21/02 H01L23/48 H01P11/00 H01Q1/00 H01Q1/22 H01Q1/38 H01Q11/00 H01Q13/00 H01Q7/00 H01R43/00 H01S4/00 H04H1/00 H04L29/06 H05K3/04 H05K3/00 H05K3/30 H05K7/02 (Core/Invention); G06F G06K (Subclass/Invention)

International (IPC 1-7): G06F G06K5/00 G06K7/00

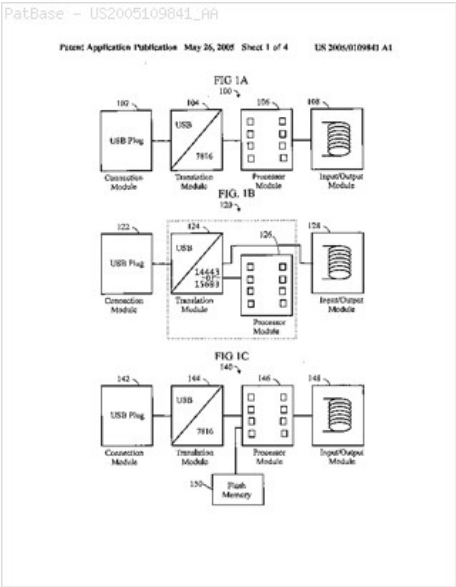
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US: 118/621 156/196 156/196S 156/242 156/268 156/60 156/60S 156/73.1 174/250 219/121.69 235/375 235/380 235/380P 235/435 235/439 235/439P 235/439S 235/441 235/441S 235/451S 235/451S 235/472.02 235/487 235/488 235/488P 235/492 235/492P 235/493 257/784 257/784P 257/E21.332 257/E21.332S 257/E21.476 257/E21.476S 257/E21.505 257/E21.505S 283/107 283/107P 29/592.1 29/600 29/600P 29/600S 29/601 29/601P 29/605 29/605S 29/606 29/606S 29/729 29/729S 29/745 29/825 29/825S 29/829 29/829S 29/831 29/832 29/832P 29/832S 29/840 29/840S 29/843 29/845 29/850 29/852 29/854 29/854P 29/857 29/857S 336/105 336/105P 340/10.1 340/572.1 340/572.7 340/572.700P 340/572.8 343/700.00R 343/700.00S 343/700MS 343/700R 343/741 343/741P 343/786 343/866 343/866P 343/867 343/870 343/873 343/873S 343/895 427/126.1 427/208.2 427/555 428/41.8 428/96 428/96P 438/106 438/106S 438/119 438/119S 438/22 438/676 438/676S 438/759 438/759S 439/131 455/41.1 455/41.100P 705/28 705/35 705/35P 705/36 705/36.00RP 705/36R 705/37 709/217 709/217P

Family:

Publication number	Publication date	Application number	Application date
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AT497223 E	20110215	AT20080759585T	20080514
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Assignee(s): (std): ADVANCED MICROELECTRONIC AND A ; ADVANCED MICROMECHANIC AND AUT ; COMISKEY PATRICK R ; DPD PATENT TRUST ; CARRE LIONEL ; ASSA ABLOY IDENTIFICATION ; CHICAGO BOARD OPTIONS EXCHANGE INC ; AMATECH KOREA ; CZORNACK JAN THOMAS ; CONNEELY PATRICK GERARD ; CONSIDINE ALAN ; FINN DAVID ; KNAPICH NORBERT ; DPD PATENT TRUST LTD ; HASEGAN VIROEL MARIAN ; LANG ULRICH ; HID GLOBAL GMBH ; FEINICS AMATECH NOMINEE TEORAN ; FEINICS AMATECH TEORANTA ; FEINICS AMATECH TEAVANTA ; LINDEN GERALD E ; FEINICS AMATECH TEORANTA LTD ; FEINICS AMATECH NOMINEE LTD ; FEINICS AMATECH TEOROWITA ; HID GLOBAL GMBH DE ; FEINES AMATECH TEORANTA ; F AND EACUTE INICS AMATECH TEORANTA ; LOTYA MUSTAFA ; FENDT THEODOR ; FEINICS AMATECH TEARANTA ; RYAN DENNIS J ; SHALEN CATHERINE T ; ASSA ABLOY IDENTIFICATION TECH ; MICROMECHANIC AND AUTOMATION T ; UMMENHOFER KLAUS ; MOLLOY DARREN

Assignee(s): SOKYMAT GMBH ; ASSA ABLOY IDENTIFICATION TECHNOLOGIES GMBH ; MICROMECHANIC AND AUTOMATION TECHNOLOGY LTD ; FEINICS AMATECH TEORANTALOWER CHURCHFIELD, COUNTY MAYOTOURMAKEADYIE ; IMASYS AG ; FEINICS AMATECH NOMINEE TEORANTA ; ASSA ABLOY IDENTIFICATION TECHNOLOGY GROUP AB ; ADVANCED MICROMECHANIC AND AUTOMATION TECHNOLOGY L ; ADVANCED MICROMECHANIC AND AUTOMATION TECHNOLOGY LTD ; ADVANCED MICROELECTRONIC AND AUTOMATION TECHNOLOGY ; ADVANCED MICROELECTRONIC AND AUTOMATION TECHNOLOGY LTD

Inventor(s): (std): LANG ULRICH ; LOTYA MUSTAFA ; MOLLOY DARREN ; UMMENHOFER KLAUS ; VIROEL MARIAN HASEGAN ; ULRICH LANG ; SHALEN CATHERINE T ; RYAN DENNIS J ; RYAN DENNIS ; LIONEL CARRE ; LINDEN GERALD E ; KNAPICH NORBERT ; FINN DAVID ; DAVID FINN ; CONSIDINE ALAN ; COMISKEY PATRICK R ; CARRE LIONEL ; CONNEELY PATRICK GERARD ; CZORNACK JAN THOMAS ; FENDT THEODOR ; FENDT THEODORE ; HASEGAN VIROEL MARIAN

Inventor(s): KLAUS UMMENHOFER ; FINN DAVIDIE

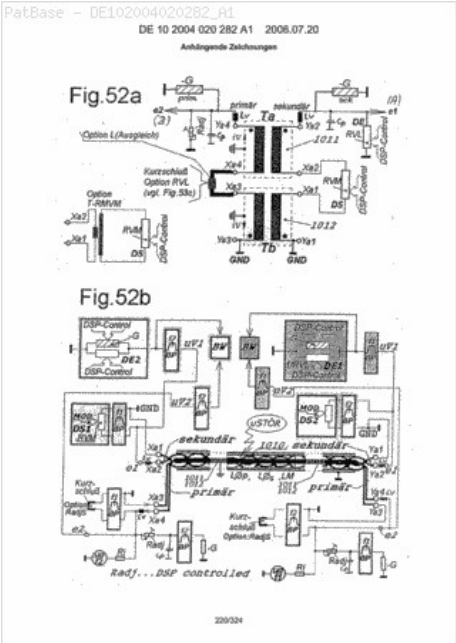
Agent(s): ALLENS ARTHUR ROBINSON PATENT AND TRADE MARKS ATTORNEYS; ALLENS PATENT AND TRADE MARK ATTORNEYS; SHELSTON IP; MBM INTELLECTUAL PROPERTY LAW LLP; FASKEN MARTINEAU DUMOULIN LLP; CREMER ULRIKE THERESIA; GROSFILLIER PHILIPPE; CREMER AND CREMER; ONE LEGAL LLC; GERALD E LINDEN; DA STAUFFER PATENT SERVICES LLC; SHERIDAN ROSS PC; BRINKS HOFER GILSON AND LIONE; GERALD E LINDEN C O STAUFFER; DWIGHT A; GERALD E; LINDEN GERALD E; STAUFFER DWIGHT A; GERLAD E; CREMER ULRIKE ET AL; BLAKELY TODD P ET AL; CREMER ULRIKE; DR CREMER ULRIKE

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK
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VC VN YU ZA ZM ZW

Title: IMPEDANCE OR ADMITTANCE CIRCUIT OHMIC LOSS MEASURING METHOD, INVOLVES FEEDING CURRENT PORTION INTO MEASURING IMPEDANCE/ADMITTANCE OF CIRCUIT AS POWER SOURCE TO REDUCE IDEAL CONDUCTIVE VALUE THAT REFERS TO CIRCUIT INDUCTIVITY/CAPACITANCE

Abstract: The method involves feeding a current portion into measuring impedance/admittance of a circuit as a power source to reduce ideal conductive value of the impedance/admittance in proportion to ohmic loss of the impedance. The current portion is fed as a current drain in the impedance/admittance to increase the value. The value refers to a circuit inductivity or capacitance and to transformed impedance or admittance. Independent claims are also included for the following: (1) a method for coding measurement values; (2) an arrangement for measuring ohmic loss in impedance or admittance circuit; (3) a method for semi-automatic or fully automatic transport as well as for evaluation and addressing of goods; and (4) a shopping trolley for executing a method for semi-automatic or fully automatic transport as well as for evaluation and addressing of goods.

Classifications:
International (IPC 8-9): G01R27/02 (Advanced/Invention); G01R27/02 (Core/Invention)
CPC: G01D5/00 G01R27/26
European: G01D5/00 G01R27/26



Family:

Publication number	Publication date	Application number	Application date
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Priority:			
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DE200410020282	20040426		

Probable Assignee: KOLLER ROMAN
Assignee(s): (std): KOLLER ROMAN
Inventor(s): (std): KOLLER ROMAN

Title: INSERTABLE WALL MOUNTED COMPUTING APPARATUS

Abstract: Source: US2006185876A The present invention is directed to provide a compact computing apparatus fit to be mounted on the wall or floor adjacent to or embedded inside the LAN jack or a main power outlet. The compact computing apparatus is optionally connected at the backside through Ethernet cable to the building LAN and connected at the front side through cables or wirelessly to display, keyboard, mouse or other peripheral devices. In a typical embodiment of the present invention power to the computing apparatus is supplied through the LAN cable. Another embodiment of the present invention utilizes a wall or floor mounted housing part comprising of an integrated LAN connector. In the preferred embodiment of the invention the computing apparatus has layered structure.

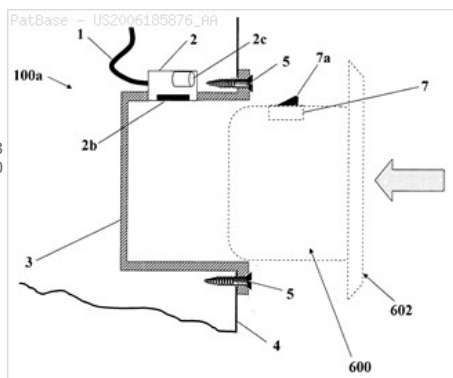
Classifications:

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G06F1/00 G06F1/16 G06F13/00 H02G3/08 H05K7/20 (Core/Invention);
H02G H04L (Subclass/Invention)

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European: G06F1/16 G06F1/18E2 G06F1/22 G06F21/71 H01R13/66 H01R23/10 H02G3/12D H02G3/12F H02G3/18 H04B3/56 H04L12/10 H04L12/24 H04L41/00 H04L49/00 T01R103/00 T01R201/02 T01R201/04 T01R24/76 T01R27/02 T04B203/54P12 T04B203/54S12 T04L12/24A2 T04L12/24B3 T04L12/24D T04L12/24E1B3B T04L12/24E1C1 T04L12/24E3 T04L12/24F3 T04L41/02B T04L41/04C T04L41/06 T04L41/08A3B T04L41/08A4A T04L41/08F T04L41/22 T04W288/02 T04W52/02 T04W88/02

US: 174/480 174/50 174/50P 174/520 174/59 361/679.01 361/679.02 361/679.020S
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Family:

Publication number	Publication date	Application number	Application date
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Probable Assignee: CHIP PC ISRAEL LTD

Assignee(s): (std): AVIV SOFFER : CHIP PC ISRAEL LTD : CHIPPC ISRAEL LTD : SOFFER AVIV

Assignee(s): CHIP PC LTD

Inventor(s): (std): AVIV SOFFER : SOFFER AVIV

Agent(s): TEITELBAUM AND MACLEAN; BECK AND ROESSIG EUROPEAN PATENT ATTORNEYS; ANGENEHM LAW FIRM LTD; WOLF BLOCK SHORR AND SOLIS COHEN LLP; WILLIAM H DIPPERT ECKERT SEAMANS CHERIN AND MELLOTT LLC; ECKERT SEAMANS CHERIN AND MELLOTT LLC; WILLIAM H

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TI TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: INTEGRATED DC/DC CONVERTER SUBSTRATE CONNECTIONS

Abstract: Source: US2006214253A Embodiments of the present invention provide an integrated circuit (IC) having an integrated DC-DC power converter therein. This IC is operable to support the distribution of combined power and data signals in a network environment such as an Ethernet network according to protocols such as the power over Ethernet (PoE) protocol. The IC includes a DC-DC power converter, a power feed circuit, and a network physical layer (PHY) module, wherein the PHY module may contain fine line structures susceptible to damage when exposed to excessive voltages. To prevent or reduce the likelihood of damage to the PHY module from voltages supplied to the DC-DC power converter, a common substrate ground is shared between the IC components.

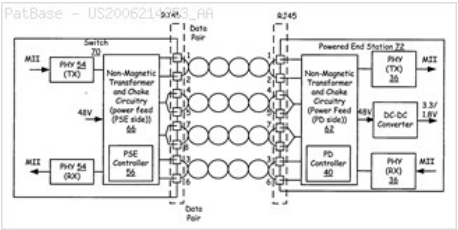
Classifications:

International (IPC 8-9): B32B9/00 G01R19/18 G01R27/04 G01R27/32 G05F1/10 G06F1/00 G06F1/26 G06F11/30 H01L21/02 H01L21/20 H01L21/76 H01L29/00 H01L29/92 H02H3/20 H02H3/22 H02H9/00 H02H9/04 H02H9/06 H02M3/24 H02M3/335 H02M5/45 H03B1/00 H03F3/38 H03F3/45 H04B1/10 H04B1/18 H04B14/06 H04B3/26 H04B3/54 H04J3/10 H04L12/10 H04L12/56 H04L25/00 H04L25/06 H04M1/00 H04M11/00 H04M3/00 H04M9/00 H05K9/00 (Advanced/Invention); H04J1/16 (Advanced/Non-invention); B32B9/00 G01R19/18 G01R27/00 G01R27/04 G05F1/10 G06F1/00 G06F1/26 G06F11/30 H01L21/02 H01L21/70 H01L29/00 H01L29/66 H02H3/20 H02H9/06 H02M3/24 H02M5/00 H03B1/00 H03F3/38 H03F3/45 H04B1/10 H04B1/18 H04B14/02 H04B3/02 H04B3/54 H04L12/10 H04L12/56 H04L25/00 H04L25/06 H04M1/00 H04M11/00 H04M3/00 H04M9/00 (Core/Invention); H04J1/00 (Core/Non-invention)

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Family:

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EP1708409 A2	20061004	EP20060251674	20060328
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WO07030303 A2	20070315	WO2006US32503	20060817
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WO07121148 A2	20071025	WO2007US66270	20070409
WO07121148 A3	20080724	WO2007US66270	20070409
WO07140467 A2	20071206	WO2007US70130	20070531
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WO08011529 A2	20080124	WO2007US73910	20070719
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Priority:

US20050665766P	20050328	US20050207601	20050819	US20050249246	20051013
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Probable Assignee: AKROS SILICON INC

Assignee(s): (std): AKROS SILICON INC ; ALTMANN MICHAEL ; CRAWLEY PHILIP JOHN ; CREPIN FRANCOIS ; CAMAGNA JOHN ; CRAWLEY PHILLIP JOHN ; CRAWLEY PHILIP J ; CAMAGNA JOHN R ; CRAWLEY PHILIP ; CAI JUN ; DHUYVETTER TIMOTHY A ; GATTANI AMIT ; GHOSHAL SAJOL ; CREPIN J FRANCOIS ; AKRAS SILICON INC

Inventor(s): (std): CAI JUN ; CAMAGNA JOHN R ; CRAWLEY PHILIP ; CREPIN J FRANCOIS ; GATTANI AMIT ; GHOSHAL SAJOL ; R CAMAGNA JOHN ; CREPIN J F ; CREPIN FRANCOIS ; CRAWLEY PHILLIP JOHN ; CRAWLEY PHILIP JOHN ; CRAWLEY PHILIP J ; CAMAGNA JOHN ; DHUYVETTER TIMOTHY A ; ALTMANN MICHAEL

Inventor(s): CREPIN J

Agent(s): KOESTNER BERTANI LLP; ROBERT A MCLAUCHLAN; KEN KOESTNER, KOESTNER BERTANI LLP; KEN KOESTNER KOESTNER BERTANI LLP; MARY JO BERTANI, KOESTNER BERTANI LLP; MARY JO BERTANI KOESTNER BERTANI LLP; KOESTNER KEN J; KEN J; MARY JO; KOESTNER PATENT LAW; KOESTNER KEN J ET AL; BERTANI MARY JO ET AL

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: EMERGENCY SUPPLIES PRE-POSITIONING AND ACCESS CONTROL METHOD

Abstract: Source: US2007203727A One provides (101) a plurality of carriable containers having emergency supplies contained therein wherein each of these carriable containers is readily carriable by an average adult human. These carriable containers are then placed (103) within one or more corresponding controlled access containers as are provided at one or more publicly accessible locations (102). Prior to a triggering catastrophic event, one or more specific authorized beneficiaries are then preauthorized (104) to have catastrophic event-based access to one or more of these carriable containers. So configured, the authorized beneficiary(s) will in turn have access to the corresponding emergency supplies that are contained within the carriable container when a triggering catastrophic event occurs.

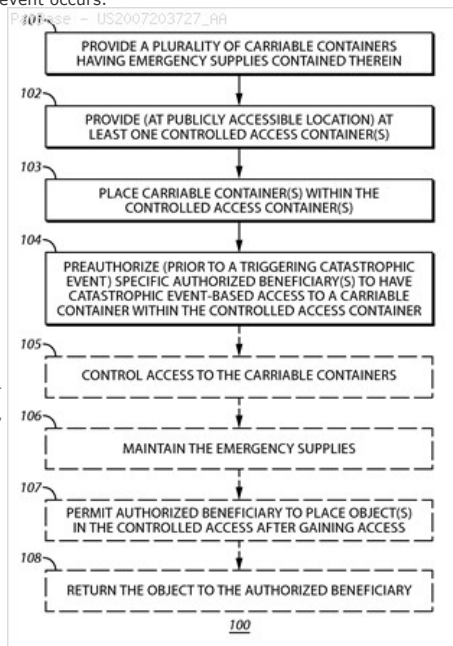
Classifications:

International (IPC 8-9): A01B71/06 A45F5/00 A47F1/04 A61B17/3213 A61B5/00 B01D46/00 B42D1/00 B60J1/00 B62D53/00 B62D59/04 B63B35/44 B65B3/04 B65G15/00 D02G3/00 E02D29/00 E04B1/00 E04B1/34 E04H1/00 E04H14/00 E04H9/00 F02M37/04 G01C21/20 G01T1/02 G05B19/418 G05B21/00 G05D1/02 G06F15/173 G06F17/30 G06F21/00 G06F9/44 G06F9/46 G06K7/01 G06Q10/00 G06Q30/00 G06Q30/06 G06Q40/00 G06Q50/00 G06Q50/26 G06Q90/00 G06Q99/00 G09B19/00 G21F3/00 H04H1/00 H04H20/59 H04L9/00 H04M11/04 (Advanced/Invention); G06Q90/00 (Advanced/Non-invention); A01B71/00 A45F5/00 A47F1/00 A61B17/32 A61B5/00 B01D46/00 B42D1/00 B60J1/00 B62D53/00 B62D59/00 B63B35/44 B65B3/04 B65G15/00 D02G3/00 E02D29/00 E04B1/00 E04B1/34 E04H1/00 F02M37/04 G01C21/20 G01T1/02 G05B19/418 G05B21/00 G05D1/02 G06F15/16 G06F17/30 G06F21/00 G06F9/44 G06F9/46 G06Q10/00 G06Q30/00 G06Q40/00 G06Q50/00 G06Q90/00 G09B19/00 G21F3/00 H04H1/00 H04L9/00 H04M11/04 (Core/Invention)

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US: 141/10 180/14.1 180/14.100P 198/321 224/101 235/382.5 235/382.500S 250/472.1 250/519.1 345/85P 379/37 379/37P 434/236 434/236S 455/3.01 455/3.010 52/169.6 52/3 52/741.1 52/741.100S 52/745.05 52/745.050P 52/79.1 52/79.100S 600/300 600/300P 701/23 705/1 705/1.1 705/1.100P 705/14.16 705/14.160P 705/14.19 705/14.190S 705/14.27 705/14.270S 705/14.28 705/14.280S 705/14.31 705/14.310S 705/14.33 705/14.330S 705/2 705/26.8 705/2P 705/314 705/314P 705/325 705/325S 705/400 705/400P 705/5 705/500 705/500P 705/52 705/52P 705/5P 705/75 705/75S 707/802 707/802S 707/E17.005 707/E17.005S 726/2 726/2S 96/222 96/222P

**Family:**

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US2007203727 AA	20070830	US20060456472	20060710
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WO07109532 A2	20070927	WO2007US64162	20070316
WO07109532 A3	20080703	WO2007US64162	20070316
WO07115184 A2	20071011	WO2007US65658	20070330
WO07115184 A3	20071221	WO2007US65658	20070330
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WO08088589 A2	20080724	WO2007US79228	20070921
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WO08091427 A2	20080731	WO2007US83211	20071031
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WO08143691 A1	20081127	WO2007US82654	20071026

Priority:

US20060361247	20060224	US20060384037	20060317	US20060381277	20060502
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Probable Assignee: SOVEREIGN DEED LLC

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KENNETH H ET AL
Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ
EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK
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SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: THERMAL AND CONDUCTIVITY SENSING SYSTEMS, DEVICES AND METHODS

Abstract: Source: US2007253463A A sensing probe is described. The sensing probe includes a probe housing having a probe tip. A thermal sensor in the housing is also included. The thermal sensor has a sensing end and a connector end, where the sensing end is thermally coupled to the probe tip. Also included are at least two leads. The leads transfer electrical signals that are used to determine temperature and conductivity. Also included is a thermal well. The thermal well includes a hollow housing of a thermally conductive material. The housing has an outer surface and an inner surface. The inner surface is a predetermined shape so as to form a mating relationship with a sensing probe. The mating thermally couples the inner surface with a sensing probe. In some embodiments, the thermal well is located on a disposable portion and the sensing probe on a reusable portion.

Classifications:

International (IPC 8-9): A61B5/00 A61B5/11 A61F7/00 A61F7/12 A61J1/14 A61J3/00 A61J7/00 A61J7/02 A61M1/00 A61M1/10 A61M1/12 A61M1/14 A61M1/16 A61M1/28 A61M1/34 A61M1/36 A61M37/00 A61M39/22 A61M39/28 A61M5/00 A61M5/14 A61M5/142 A61M5/145 A61M5/168 A61M5/172 A61M5/36 B01D11/00 B01D19/00 B01D21/30 B01D35/30 B01D61/00 B01D61/24 B01D61/26 B01D61/28 B01D61/30 B01D61/32 B01D63/00 B01D65/02 B01F15/02 B01F15/04 B01F3/08 B01J4/00 C02F1/44 C02F11/00 C02F9/00 F04B13/02 F04B17/00 F04B23/02 F04B23/04 F04B23/10 F04B43/00 F04B43/02 F04B43/06 F04B43/073 F04B43/08 F04B43/10 F04B43/113 F04B43/12 F04B45/00 F04B45/04 F04B45/053 F04B49/00 F04B49/06 F04B53/00 F04B53/10 F04B53/16 F04B9/109 F04C5/00 F16B2/02 F16B2/10 F16K31/02 F16K31/06 F16K31/12 F16K31/14 F16K7/04 F16K7/06 F16M11/00 F16M13/02 F17D1/14 F17D3/00 F28D21/00 F28F13/06 F28F27/00 F28F3/14 G01D9/42 G01F1/00 G01F1/56 G01F1/66 G01F1/704 G01F11/08 G01F22/00 G01F23/00 G01J1/00 G01K1/00 G01K1/08 G01K1/16 G01K13/00 G01K7/00 G01L9/00 G01M3/18 G01N15/02 G01N21/59 G01N25/18 G01R21/14 G05B15/00 G05D11/00 G05D7/00 G05D7/06 G06F1/16 G06F19/00 G06F3/048 G06F3/0481 G06F3/0488 G06Q5/00 G06Q50/22 G06T5/00 G06T5/50 G06T7/00 H04L12/56 H04L29/08 H04N7/18 H05K7/14 (Advanced/Invention); A61F7/12 A61M1/10 A61M1/14 A61M1/16 A61M1/34 A61M1/36 A61M39/10 F04B43/08 F04B43/12 F04B45/06 F04C5/00 (Advanced/Non-invention); A61M1/00 A61M1/10 A61M1/14 A61M1/16 A61M1/28 A61M1/34 A61M1/36 A61M37/00 A61M39/00 A61M5/168 B01D19/00 B01D21/30 B01D35/30 B01D61/24 B01D65/00 B01F3/08 B01J4/00 F04B17/00 F04B23/00 F04B43/00 F04B43/02 F04B43/06 F04B43/12 F04B45/00 F04B53/00 F16K31/12 F16K7/00 F17D1/00 F28F13/00 F28F27/00 G01F11/02 G01F23/00 G01K1/00 G01N25/18 G06F3/048 (Core/Invention)

International (IPC 1-7): A61M1/10

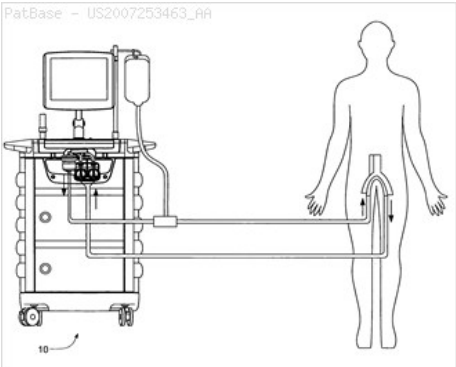
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US: 137/100 137/12 137/12P 137/154 137/2 137/2S 137/3 137/386 137/3S 137/565.01 137/565.010S 137/565.3 137/595 137/843 137/843S 137/885 137/885S 165/122 165/122S 165/134.1 165/134.100S 210/101 210/101S 210/103 210/106 210/106 210/134 210/137 210/137S 210/141 210/143 210/175 210/175P 210/177 210/184 210/195.2 210/195.200S 210/198.1 210/198.100S 210/206 210/206S 210/209 210/209S 210/232 210/234 210/235 210/238 210/246 210/246S 210/251 210/252 210/257.1 210/257.2 210/258 210/321.6 210/321.64 210/321.65 210/321.69 210/321.71 210/321.710S 210/321.72 210/391 210/408 210/416.1 210/427 210/636 210/636S 210/645 210/646 210/647 210/650 210/663 210/791 210/793 210/85 210/85P 210/87 210/90 210/96.2 210/97 211/182 248/218.4 251/324 251/5 251/7 251/9 312/209 312/321.5 324/105 324/105P 324/439 348/135 348/143 348/160 356/436 361/679.01 366/150.1 366/150.100P 366/152.2 366/162.1 366/162.100P 374/148 374/183 374/208 374/208P 374/444 374/44P 374/E1.011 374/E1.021 374/E10.11S 374/E10.21S 403/11 403/14 417/21 417/282 417/286 417/286S 417/298 417/302 417/313 417/32 417/37 417/375 417/375P 417/375S 417/38 417/38P 417/390 417/393 417/394 417/395 417/395P 417/412 417/413.1 417/413.100S 417/43 417/437 417/46 417/47 417/47A 417/47AS 417/476 417/477.2 417/477.200P 417/477.200S 417/480 417/53 417/53S 417/63 417/63S 422/44 422/544 422/565 600/301 600/595 604/113 604/113S 604/152 604/154 604/155 604/246 604/248 604/250 604/258 604/28 604/29 604/29P 604/4.01 604/4.010S 604/410 604/5.01 604/5.04 604/5.040P 604/5.040S 604/500 604/506 604/6.01 604/6.07 604/6.070S 604/6.09 604/6.1 604/6.11 604/6.110P 604/6.110S 604/6.13 604/6.130P 604/6.16 604/6.160P 604/65 604/67 604/8 607/104 607/104P 607/106 607/106S 700/244 700/273 700/273S 700/282 702/19 705/2 705/2P 705/3 705/3P 709/217 709/219 709/238 715/764 715/764S 715/780 73/290.00RP 73/290R 73/861.18 73/863.31 73/863.41 73/863.61 92/98R 95/241 95/259 95/261 96/155 96/209 96/211 96/219

Family:

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EP2010247 A1	20090107	EP20070755392	20070413
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EP2131887 A2	20091216	EP20080730871	20080227
EP2131887 B1	20150408	EP20080730871	20080227
EP2131889 A1	20091216	EP20080726213	20080227
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EP2724736 A1	20140430	EP20130184795	20070413
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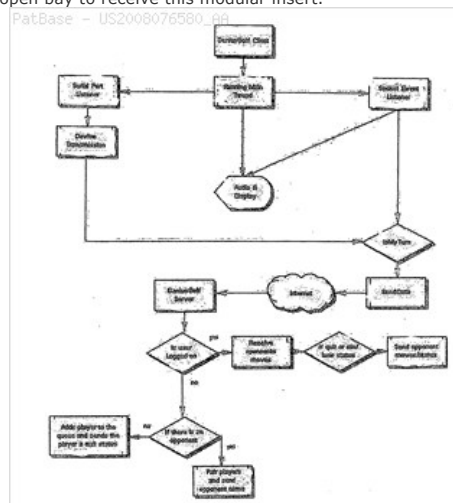
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Assignee(s): (std):	ALTOBELLI DAVID E ; BALLANTYNE TODD A ; BLUMBERG JR DAVID ; BLASI JOHN J ; DALE JAMES D ; DEKA PRODUCTS LP ; BODWELL JESSE T ; BIASI JOHN J ; DEKE PRODUCTS LTD PARTNERSHIP ; CHAWAN ARUN D ; KERWIN JOHN M ; FICHERA STEPHEN L ; FICHERA STEPEN L ; DESCH MARTIN D ; GARY LARRY B ; GORAYEB MARC J ; KARWIN JOHN M ; MERWE DIRK A VAN D ; KAMEN DEAN ; GRAY LARRY B ; LEONARD SCOTT A ; DEMERS JASON A ; GRANT KEVIN L ; KENLEY RODNEY S ; FLYNN CATHARINE N ; GIANT KEVIN L ; COLLINS DAVID E ; DEKA RES AND DEV ; PERRY N CHRISTOPHER ; TRACEY BRIAN ; VAN DER MERWE DIRK A ; WILT MICHAEL J ; OWENS KINGSTON ; TRACY BRIAN ; ROSSE JONATHAN P ; YEE BRIAN K ; TRACEY BRIAN D ; ROSSE JOHNATHAN P ; PRESCOTT SHANNON ; TRACEY BRAIN D ; TURNER JAMES G ; SCARPACI JACOB W ; THURBER JONATHAN R ; SCARPATI JACOB W ; DEKA PRODUCTIONS LTD PARTNERSHIP
Assignee(s):	CLARKE KAITLYN S ; YOO BRIAN H ; PERET BOB D ; USMAN FARRUKH ; SCHNELLINGER THOMAS S ; SMITH STANLEY B III ; ZOBRO JONATHAN ; SLOSS JAMES L ; PRIBYL ERIC L ; NEWMAN RICHARD M ; PLACE MICHAEL S ; NORRIS MICHAEL G ; SLATE MICHAEL J ; PARKER JONATHAN ; THERRIEN ALEXANDER R ; PAWLOWSKI DANIEL F ; SABIN ERIK N ; PERRY N ; DEKA PRODUCTS PARTNERSHIP LTD340 COMMERCIAL STREETMANCHESTERNH03101US ; DEKA PRODUCTIONS PARTNERSHIP LTD ; DEKA RESEARCH AND DEVELOPMENT ; LANGENFELD CHRISTOPHER C ; MURPHY COLIN H ; JOHNSON MATTHEW J ; KANE DEREK G ; DURAND KEVIN A ; LANIGAN RICHARD J ; LANIER GREGORY R JR ; MANDRO MARC A ; MORGAN FREDERICK ; LIM SIMON W ; HEINZMANN RICHARD KURT ; FRIEDRICH THOMAS A ; JANWAY JEFFREY M ; FARLOW JARED N ; FICHERA STEPHAN L ; GUPTA RAHUL ; DEKA PRODUCTS LTD ; BLUMBERG DAVID ; DEKE PRODUCTS PARTNERSHIP LTD ; DEKE PRODUCTS LIMITED PARTNERSHIP ; BLUMBERG DAVID JR ; BRYANT ROBERT J JR ; CANNAN DAVID D B ; DEKA PRODUCTS PARTNERSHIP LTD ; DEKA PRODUCTS LIMITED PARTNERSHIP ; BEAVIS RUSSELL H ; BAIER MICHAEL J
Inventor(s): (std):	ALTOBELLI DAVID ; ALTOBELLI DAVID E ; ARUN CHAWAN ; BAIER MICHAEL J ; BIASI JOHN J ; BLUMBERG DAVID ; BLUMBERG DAVID JR ; BODWELL JESSE T ; BRIAN TRACY ; CHAWAN ARUN ; CHAWAN ARUN D ; CLARKE KAITYN S ; DALE JAMES ; DALE JAMES D ; DEAN KAMEN ; DEMERS JASON ; DEMERS JASON A ; FLYNN CATHARINE N ; GIANT KEVIN L ; GRANT KEVIN I ; GRANT KEVIN L ; GRAY LARRY ; GRAY LARRY B ; KENLEY RODNEY S ; KERWIN JOHN M ; LANGENFELD CHRISTOPHER ; LANGENFELD CHRISTOPHER C ; LEONARD SCOTT ; LEONARD SCOTT A ; MARCEK GEOFFREY A ; KAMEN DEAN ; MERWE DIRK VAN D ; MURPHI COLIN H ; MURPHY COLIN H ; NORRIS MICHAEL G ; OWENS KINGSTON ; PARKER JONATHAN ; PAWLOWSKI DANIEL F ; PERET BOB D ; PERRY CHRISTOPHER ; PERRY CHRISTOPHER N ; PERRY N CHRISTOPHER ; PLACE MICHAEL S ; ROSSE JOHNATHAN P ; ROSSE JONATHAN P ; SABIN ERIK N ; SCHNELLIGER THOMAS S ; TODD A BALLANTYNE ; TRACEY BRAIN D ; TRACEY BRIAN ; TRACEY BRIAN D ; TRACY BRIAN ; USMAN FARRKH ; VAN DER MERWE DIRK ; VAN DER MERWE DIRK A ; WILT MICHAEL ; WILT MICHAEL J ; SHANNON PRESCOTT ; SLATE MICHAEL J ; THERRIEN ALEXANDER R ; WITT MICHAEL J ; YEE BRIAN K ; ZOBRO JONATHAN ; ZASLOW BENJAMIN ; YOO BRIAN H ; WILT J MICHAEL ; USMAN FARRUKH ; TURNER JAMES G ; TRACY BRAIN ; THURBER JONATHAN R ; SMITH STANLEY B III ; SMITH III STANLEY B ; SLOSS JAMES L ; SCARPACI JACOB W ; RIVINIUS GREGG W ; PRIBYL ERIC L ; SCHNELLINGER THOMAS S ; SCARPATI JACOB W ; PERRY N C ; PERET BOB DAVID ; PERET BOB D ; NEWMAN RICHARD M ; MORGAN FREDERICK ; MERWE DIRK A VAN D ; MANDRO MARC A ; LIM SIMON W ; LANIGAN RICHARD J ; LANIER JR GREGORY R ; JOHNSON MATTHEW J ; JANWAY JEFFREY M ; HEINZMANN RICHARD KURT ; GUPTA RAHUL ; GRANT L KEVIN ; GORAYEB MARC J ; GILL MATTHEW R ; GARY LARRY B ; FRIEDRICH THOMAS A ; FICHERA STEPHEN L ; FICHERA STEPHAN L ; FICHERA STEPEN L ; FARLOW JARED N ; LANIER GREGORY R JR ; KARWIN JOHN M ; DURAND KEVIN A ; DESCH MARTIN D ; DERMERS JASON A ; DER MERWE DIRK A VAN ; KANE DEREK G ; DALE D JAMES ; COLLINS DAVID E ; CLARKE KAITLYN S ; CHRISTOPHER PERRY N ; CANNAN DAVID D B ; BRYANT ROBERT J JR ; BRYANT JR ROBERT J ; BRIAN TRACEY ; BLUMBERG JR DAVID ; BLASI JOHN J ; PRESCOTT SHANNON ; BEAVIS RUSSELL H ; BALLANTYNE TODD A
Inventor(s):	ARUN D CHAWAN ; JESSE T BODWELL ; GEOFFREY A MARCEK ; DAVID E COLLINS ; BEAVIS RUSSELL HUS ; BLUMBERG DAVID JRUS ; BODWELL JESSE ; BRYANT ROBERT J ; BRYANT ROBERT J JRUS ; CANNAN DAVID D BUS ; CLARKE KAITLYN SUS ; JOHNSON MATTHEW JUS ; DEMERS JASON AUS ; KANE DEREK GUS ; LANIER GREGORY R ; DURAND KEVIN AUS ; LANIER GREGORY R JRUS ; LANIGAN RICHARD JUS ; MARCEK GEOFFREY ; MANDRO MARC AUS ; N CHRISTOPHER PERRY ; PERET BOB DUS ; SCARPACI JACOB WUS ; PERRY N CHRISTOPHERUS ; SCHNELLINGER THOMAS SUS ; SMITH STANLEY B ; SMITH STANLEY B IIUS ; TRACEY BRIAN DUS ; TURNER JAMES GUS ; USMAN FARRUKHUS ; YOO BRIAN HUS ; YEE BRIAN KUS ; THERRIEN ALEXANDER RUS ; SLATE MICHAEL JUS ; WILT MICHAEL JUS ; SCOTT A LEONARD ; SABIN ERIK NUS ; ROSSE JONATHAN PUS ; PLACE MICHAEL SUS ; PERRY N ; PAWLOWSKI DANIEL FUS ; PARKER JONATHANUS ; NORRIS MICHAEL GUS ; MURPHY COLIN HUS ; MICHAEL J WILT ; KAMEN DEANUS ; MERWE DIRK A VAN DUS ; LANGENFELD CHRISTOPHER CUS ; LARRY B GRAY ; KERWIN JOHN MUS ; KEVIN L GRANT ; GRAY LARRY BUS ; JAMES D DALE ; JASON A DEMERS ; GRANT KEVIN ; BLUMBERG DAVIDUS ; BIASI JOHN JUS ; BAIER MICHAEL JUS ; BALLANTYNE TODD AUS
Agent(s):	PIZZEYS ; PIZZEYS PATENT AND TRADE MARK ATTORNEYS; GRIFFITH HACK; GOWLING LAFLEUR HENDERSON LLP; CASSAN MACLEAN; GREENE SIMON KENNETH; HOFFMANN EITL; CHAPMAN PATRICK; BROMBERG AND SUNSTEIN LLP; MICHELLE SAQUET TEMPLE; DEKA RESEARCH AND DEVELOPMENT C O WOLF GREENFIELD AND SACKS PC CORP; WOLF GREENFIELD AND SACKS PC; WOLF GREENFIELD AND SACKS P C; WOLD GREENFIELD AND SACKS PC; POMIANEK MICHAEL J; TEMPLE MICHELLE SAQUET; POMIANEK MICHAEL J ET AL; BEEDE MELISSA A; GORAYEB MARC J; WYNINEGAR JAMES D JR; WYNINEGAR JAMES D JR ET AL; WYNINEGAR JR JAMES D; WYNINEGAR JAMES D
Designated states:	AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Abstract: Source: US2008076580A A Smart Internet Sports Apparatus protocol which can communicate with the Internet allowing a plurality of data to be captured processed and analyzed. Each Internet sports apparatus device creates its own proprietary unique data profile, and can exchange its profile with another Internet sports apparatus protocol or other proprietary digital devices. The Internet sports apparatus protocol automatically allows as many participants including those in sports to adjust to the number of active players who have been granted permission to join. The original system design talked about using radio frequency protocol and left open the door for other wireless protocols. Now with this new invention, other wireless protocols can be used as a communication bridge allowing a broader use of the technologies. The Smart Internet Sports Apparatus protocols now used Zigbee, Bluetooth, Wi-Fi, Wi-Max, and Ultra Wide Band (UWB). Future uses can expand to cellular protocol. Using GPS the Smart sports apparatus protocols with embedded single and multiplayer software is said sports apparatus, can now be tracked to a specific location. The invention employs GPS to distinguish on Smart sports apparatus device from another. The invention also allows the interchanging of specific wireless protocols in a custom sports apparatus device with an open bay to receive this modular insert.



Publication number	Publication date	Application number	Application date
US2008076580 AA	20080327	US20070901553	20070918
US2008188310 AA	20080807	US20070901552	20070918
US2011081978 AA	20110407	US20100799516	20100426
US2011082571 AA	20110407	US20100799529	20100426
US2011087344 AA	20110414	US20100799521	20100426
US2011092260 AA	20110421	US20100799519	20100426
US2011130223 AA	20110602	US20100799518	20100426
US2011151977 AA	20110623	US20100799523	20100426
US2011212757 AA	20110901	US20100799517	20100426
US2011281621 AA	20111117	US20100799520	20100426
US7789742 BA	20100907	US20000570233	20000512

US19990133722P	19990512	US20000570233	20000512	US20070901553	20070918
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Agent(s): WILBERT MURDOCK

Title: THERMALLY ENHANCED SOLID-STATE GENERATOR

Abstract: Source: US2008083444A A solid state energy conversion device along with its production methods and systems of use is provided. The device in its most basic form consists of two layers, in contact with each other, of dissimilar materials in terms of electron density and configuration, sandwiched between metal layers, which serve as the anode and cathode of the device. One of the inside layers is made of a stabilized mixture of carbon and an ionic material (carbon matrix). The other inner material consists of a stabilized oxide mixed with an ionic material (oxide matrix). This device takes advantage of the built-in potential that forms across the barrier between the carbon matrix and the oxide matrix. The built-in potential of the device (when not attached to a resistive load at the terminals), which is determined mathematically by integrating the electrostatic forces that have created themselves across the barrier, will rise or fall in direct proportion to the rise and fall of the device temperature (in kelvins). When a load is attached across the terminals of the device, current flows. Depending on the size of the load or the surface area of the device, a reduced current will allow sustained recombination such that the built-in potential and current remains steady overtime. Otherwise, the current curve will fall over time similar to a capacitor device. Experimentation shows that current rises by the fourth power of the temperature factor.

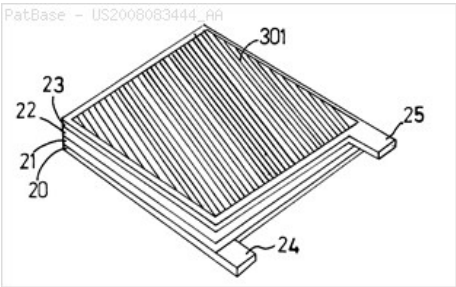
Classifications:

International (IPC 8-9): H01G9/21 H01L35/00 H01L35/02 H01L35/28 H01M14/00 H01M8/04 H01M8/08 H01M8/10 (Advanced/Invention); H01L35/00 (Core/Invention)

CPC: H01M14/00 H01L35/28 H01G11/04 H01G11/04 H01G9/15 Y02E60/13 H01G9/21

European: H01G9/15 H01M14/00

US: 136/200 136/205



Family:

Publication number	Publication date	Application number	Application date
US2008083444 AA	20080410	US20060543001	20061004
US2013228206 AA	20130905	US20130834771	20130315
US2013263904 AA	20131010	US20130835069	20130315
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WO14144218 A1	20140918	WO2014US28529	20140314
WO14144350 A1	20140918	WO2014US28716	20140314
WO14151156 A1	20140925	WO2014US25122	20140314

Priority:

US20050723696P 20051005 US20060543001 20061004 US20130834771 20130315
US20130835069 20130315 US20130835373 20130315

Probable Assignee: BERETICH THOMAS

Assignee(s): (std): BERETICH THOMAS ; BERETICH THOMAS MCPHAIL

Inventor(s): (std): BERETICH THOMAS ; BERETICH THOMAS MCPHAIL

Agent(s): THOMAS BERETICH

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: USE OF MICRO-ELECTRO-MECHANICAL SYSTEMS (MEMS) IN WELL TREATMENTS

Abstract: Source: US2008236814A A method comprising placing a sealant composition comprising one or more MEMS sensors in a wellbore and allowing the sealant composition to set. A method of servicing a wellbore comprising placing a MEMS interrogator tool in the wellbore, beginning placement of a sealant composition comprising one or more MEMS sensors into the wellbore, and terminating placement of the sealant composition into the wellbore upon the interrogator tool coming into close proximity with the one or more MEMS sensors. A method comprising placing a plurality of MEMS sensors in a wellbore servicing fluid. A wellbore composition comprising one or more MEMS sensors, wherein the wellbore composition is a drilling fluid, a spacer fluid, a sealant, or combinations thereof.

Classifications:

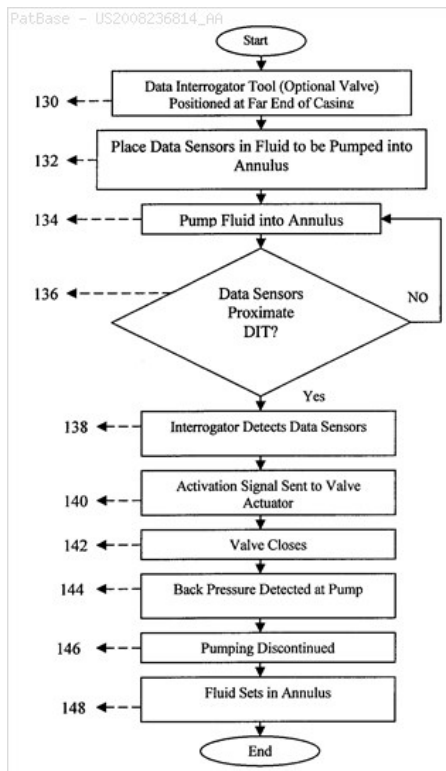
International (IPC 8-9): B67D7/06 C04B14/00 C04B16/08 C04B20/00 C04B22/00 C04B24/00 C04B24/10 C04B24/12 C04B28/00 C04B28/02 C04B28/06 C04B32/00 C04B38/00 C04B40/02 C04B40/06 C04B7/00 C04B7/34 C09K8/00 C09K8/03 C09K8/42 C09K8/467 C09K8/50 E21B19/00 E21B19/22 E21B23/00 E21B27/02 E21B33/13 E21B33/14 E21B43/00 E21B43/22 E21B43/25 E21B44/00 E21B47/00 E21B47/01 E21B47/017 E21B47/08 E21B47/09 E21B47/10 E21B47/12 E21B47/13 G01N33/24 G01V3/00 G01V3/18 G06K19/077 G06K7/10 (Advanced/Invention); B67D7/06 C09K8/50 E21B33/13 E21B47/00 (Core/Invention)

International (IPC 1-7): E21B33/00

CPC: E21B47/09 G01V3/00 E21B33/14 C09K8/467 E21B41/00 C04B22/00 C04B24/121 G06K19/07749 E21B47/124 C09K8/03 G01N33/24 G01V15/00 E21B47/12 G06K7/10366 E21B47/00 Y02W30/92 C04B28/02 C04B28/06 C04B40/0633 C04B40/0641 C09K8/426 C09K8/428 E21B23/00 E21B27/02 G06K15/1811 G06F3/1205 G06F3/1242 G06F3/1246 G06F3/1258 G06F3/1285 G06K15/02 G06K15/1848 G06K19/077 E21B33/13 E21B43/25 E21B47/0005 E21B47/01 E21B47/10 E21B47/122

European: C04B28/02 C04B28/06 C04B40/06C C04B40/06D C09K8/42P C09K8/42S C09K8/467 E21B23/00 E21B27/02 E21B33/13 E21B41/00 E21B43/25 E21B47/00F E21B47/01 E21B47/09 E21B47/10 E21B47/12 E21B47/12M G06F3/12T G06K15/02

US: 106/606 106/638 106/673 106/677 166/177.4 166/250.01 166/250.010P 166/250.010S 166/250.04 166/250.040S 166/250.07 166/250.1 166/250.14 166/253.1 166/253.100P 166/254.1 166/254.100S 166/255.1 166/282 166/285 166/286 166/292 166/293 166/310 166/65.1 166/66 166/66S 222/192 222/192S 235/375 235/492 340/853.2 340/853.3 340/853.300P 340/854.8 340/856.4 340/856.400P 507/200 507/200S

**Family:**

Publication number	Publication date	Application number	Application date
AR077946 AA	20111005	AR2010P103082	20100824
AR077949 AA	20111005	AR2010P103086	20100824
AU2012220382 AA	20120830	AU20120220382	20120221
AU2013338502 AA	20140508	AU20130338502	20130925
AU2014248466 AA	20141009	AU20140248466	20140317
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CA2889056 AA	20150422	CA20132889056	20130925
CA2902590 AA	20150825	CA20142902590	20140317
CA2902590 AA	20141009	CA20142902590	20140317
EP2129867 A1	20091209	EP20080718914	20080328
EP2129867 B1	20130821	EP20080718914	20080328
EP2336487 A1	20110622	EP20110159484	20080328
EP2336487 B1	20131030	EP20110159484	20080328
EP2343434 A1	20110713	EP20110159483	20080328
EP2489828 A1	20120822	EP20120167946	20080328
EP2489829 A1	20120822	EP20120167947	20080328
EP2489829 B1	20140416	EP20120167947	20080328
EP2914680 A2	20150909	EP20130773540	20130925
GB201205235 A0	20120509	GB20120005235	20100823
GB201205236 A0	20120509	GB20120005236	20100820
GB201314911 A0	20131002	GB20130014911	20120221
GB2486138 A1	20120606	GB20120005235	20100823
GB2486138 B2	20140528	GB20120005235	20100823
GB2487856 A1	20120808	GB20120005236	20100820
GB2505085 A1	20140219	GB20130014911	20120221
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NO20131262 A	20131121	NO20130001262	20130920
US2008236814 AA	20081002	US20070695329	20070402
US2010050905 AA	20100304	US20090547275	20090825
US2010051266 AA	20100304	US20090618067	20091113
US2010051275 AA	20100304	US20090547233	20090825
US2011186290 AA	20110804	US20110031535	20110221
US2011187556 AA	20110804	US20110031515	20110221
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WO08119963 A1	20081009	WO2008GB01084	20080328
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Priority:

US20070695329	20070402	WO2008GB01084	20080328	US20090547275	20090825
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Probable Assignee: HALLIBURTON ENERGY SERVICES INC

Assignee(s): (std): BADALAMENTI ANTHONY ; BARTEE CHARLES ; BITTAR MICHAEL ; BONAVIDES CLOVIS ; COVINGTON RICK ; COVINGTON RICK L ; HALLIBURTON ENERGY SERVICES INC ; HALLIBURTON ENERGY SERV INC ; CURTIS PHILIP ANTHONY ; LEWIS SAM ; DAVIS LYNN ; COVINGTON RICKY L ; MANDAL BATAKRISHNA ; RAVI KRISHNA M ; MOAKE GORDON ; FRISCH GARY ; GOODWIN SCOTT ; MCGUIRE KRISTOPHER ; RODDY CRAIG W ; RODDY CRAIG ; REYES PRISCILLA T ; ROBERSON MARK ; REYES PRISCILLA ; TURNER CRAIG ROBERT ; RODDY CRAIG WAYNE ; TAPIE WILLIAM ; RODNEY PAUL ; ROTHROCK GINGER ; ROBERSON MARK W

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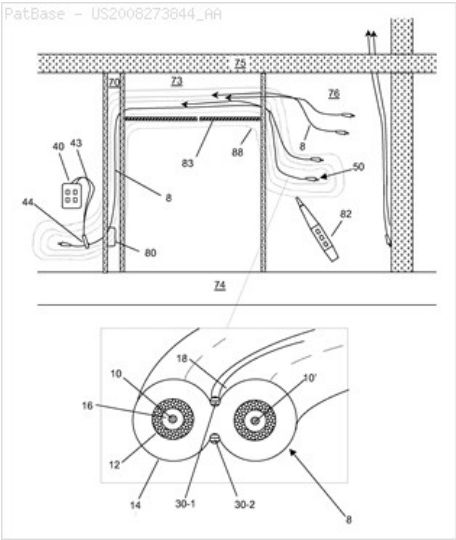
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Title: ELECTRICALLY TRACEABLE AND IDENTIFIABLE FIBER OPTIC CABLES AND CONNECTORS

Abstract: Source: US2008273844A Composite fiber optic cables having exposed, conductive traces external to the cable jacket enable non-invasive, wireless electrical tone tracing of fiber optic cables. The cross sectional geometry of the fiber optic cable prevents conductive traces from short circuiting when abutting other cables or grounded conductive elements. Moreover, the structure allows convenient electrical contact to the conductive traces at any location along the longitudinal extent of the cable without requiring penetration of the cable jacket or removal of fiber optic connectors. Traceable fiber optic cables of various types are disclosed, including simplex, duplex and ribbon cables. Systems of traceable cables utilizing connectors with integrated electrical antenna elements attached to the conductive elements of cable and RFID tags for remote connector port identification are further disclosed.

Classifications:

International (IPC 8-9): G02B6/44 G06K19/077 G08B13/14 G08B26/00 H04B10/00 H04B10/07 H04B10/12 (Advanced/Invention); H04B10/00 (Core/Invention)
CPC: G06K7/10178 H04B10/07 G06K19/07777 G06K19/07722 G02B6/3895 G02B6/447 G02B6/3817
European: G02B6/38D15 G02B6/44C8T
US: 340/505 340/572.1 340/572.100S 340/572.7 385/101 385/101P 385/101S 398/113 398/115 398/116 398/116P 398/117



Family:

Publication number	Publication date	Application number	Application date
US2008273844 AA	20081106	US20080114117	20080502
US2010098425 AA	20100422	US20090626680	20091126
US2011150488 AA	20110623	US20110035733	20110225
US2012219259 AA	20120830	US20120406372	20120227
US2015222352 AA	20150806	US20130047169	20131007
US7920764 BB	20110405	US20080114117	20080502
US8150227 BB	20120403	US20110035733	20110225
US8428405 BB	20130423	US20120406372	20120227
US8554033 BB	20131008	US20090626680	20091126

Priority:
US20070927773P 20070504 US20080114117 20080502 US20080119503P 20081203
US20090626680 20091126 US20110035733 20110225 US20120406372 20120227
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Title: REDUNDANT ELECTRICAL ARCHITECTURE FOR PHOTOVOLTAIC MODULES

Abstract: Source: US2009183760A One example embodiment includes a PV module comprising a conductive backsheet, a substantially transparent front plate, a plurality of PV cells, a plurality of conductive spacers, and a power conversion device. The PV cells can be disposed between the conductive backsheet and the front plate and can be arranged in a plurality of rows. The PV cells within each row can be connected to each other in parallel and the rows can be connected in series. The PV cells can be interconnected between the conductive spacers. The power conversion device can be redundantly connected to the PV cells via a last conductive spacer connected to a last row. The power conversion device can substantially maintain a maximum peak power of the PV module and can convert a lower voltage collectively generated by the PV cells to a predetermined stepped up voltage greater than or equal to 12 volts.

Classifications:

International (IPC 8-9): B05D3/06 B23K26/00 B29C59/16 B32B37/00 E06B7/08 F24J2/16 F24J2/46 F24J2/52 G01D18/00 G01R27/08 G01R31/40 G02B7/183 G05B15/02 G05F1/46 G06F1/26 G06F17/50 H01L21/00 H01L21/02 H01L25/00 H01L31/02 H01L31/0203 H01L31/0236 H01L31/032 H01L31/04 H01L31/042 H01L31/048 H01L31/05 H01L31/052 H01L31/054 H01L31/18 H01L51/40 H02J1/00 H02J3/38 H02M7/00 H02N6/00 H02S10/00 H02S20/00 H02S40/22 H02S40/30 H02S40/32 H02S40/34 H02S40/36 H02S99/00 (Advanced/Invention); H01L31/00 H02J1/12 (Advanced/Non-invention); B32B37/00 E06B7/02 G01D18/00 G05B15/02 G06F1/26 G06F17/50 H01L31/04 H01L31/042 H01L31/052 H01L31/18 (Core/Invention); H02J1/10 (Core/Non-invention)

International (IPC 1-7): H02N6/00

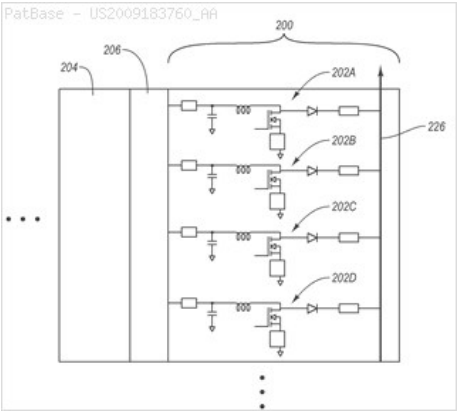
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European: B32B37/02 E06B7/08 E06B7/082 H01L31/0236 H01L31/02E2B H01L31/02H2B H01L31/032C H01L31/0376B H01L31/0392 H01L31/042 H01L31/042B H01L31/042D H01L31/045 H01L31/048 H01L31/05 H01L31/052B H02M7/00D L32B310/08B6 L32B311/00 L32B311/24 L32B367/00 L32B37/12 L32B38/00A L32B38/06 L32B457/12 P06B9/24H T01L31/0224B2 T01L31/0236 T01L31/032C T01L31/0392 T01L31/20C Y02E10/50 Y02E10/52 Y02E10/54B Y02E10/54N Y02E10/56

US: 136/244 136/244S 136/246 136/249 136/251 136/252 136/256 136/259 156/250 156/250S 219/121.66 219/121.660P 219/121.660S 219/121.69 219/121.690S 250/252.1 250/252.100S 257/E31.027 257/E31.027S 257/E31.054 257/E31.127 257/E31.127S 264/446 264/446P 307/52 307/71 307/71S 307/82 324/679 324/679S 427/554 427/554S 438/15 438/17 438/17S 438/59 438/62 438/66 438/662 438/665 438/66S 438/67 438/71 438/84 438/84P 438/89 52/473 52/473S 700/275 700/275P 700/286 700/286S 703/1 703/15

Family:

Publication number	Publication date	Application number	Application date
CN101978510 A	20110216	CN200980109824	20090121
CN101978510 B	20120509	CN200980109824	20090121
CN102484154 A	20120530	CN201080036349	20100615
CN102484154 B	20141224	CN201080036349	20100615
CN104736943 A	20150624	CN201380051806	20130930
EP2235755 A2	20101006	EP20090702762	20090121
EP2235755 A4	20130724	EP20090702762	20090121
EP2443666 A2	20120425	EP20100790069	20100615
EP2443666 A4	20130605	EP20100790069	20100615
EP2774263 A1	20140910	EP20120846494	20121031
EP2774263 A4	20150121	EP20120846494	20121031
EP2911263 A2	20150826	EP20150158419	20100615
IN00387DN2012 A	20150821	IN2012DN00387	20120113
IN02615DN2015 A	20150918	IN2015DN02615	20150331
JP2012530382 T2	20121129	JP20120516209T	20100615
JP2015092829 A2	20150514	JP20150026500	20150213
JP2015502728 T2	20150122	JP20140540038T	20121031
KR20140117354 A	20141007	KR20147014579	20121031
US2009183760 AA	20090723	US20090357260	20090121
US2009183763 AA	20090723	US20090357268	20090121
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US2010131108 AA	20100527	US20100684595	20100108
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US8586398 BB	20131119	US20100820560	20100622
US8748727 BB	20140610	US20090357268	20090121
US8828778 BB	20140909	US20120485210	20120531
US8933320 BB	20150113	US20090357260	20090121
WO09092109 A1	20090723	WO2009US31594	20090121
WO09092110 A2	20090723	WO2009US31596	20090121
WO09092110 A3	20091029	WO2009US31596	20090121
WO09092111 A2	20090723	WO2009US31597	20090121
WO09092111 A3	20091119	WO2009US31597	20090121
WO09092111 A8	20100826	WO2009US31597	20090121
WO10148009 A2	20101223	WO2010US38702	20100615
WO10148009 A3	20110324	WO2010US38702	20100615



WO11084836 A2	20110714	WO2010US61864	20101222
WO11084836 A3	20111117	WO2010US61864	20101222
WO13066998 A1	20130510	WO2012US62784	20121031
WO14055454 A1	20140410	WO2013US62747	20130930
WO15027104 A1	20150226	WO2014US52166	20140821

Priority:

US20080022280P 20080118	US20080022278P 20080118	US20080022277P 20080118
US20080022246P 20080118	US20080022228P 20080118	US20080022242P 20080118
US20080022234P 20080118	US20080022258P 20080118	US20080022236P 20080118
US20080022267P 20080118	US20080022245P 20080118	US20080022240P 20080118
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WO2013US62747 20130930		

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Inventor(s): RAYMOND W KNIGHT ; STEVEN E WHEELER ; STOVER LANCE ; MURNAN THOMAS ; MEYER DALLAS ; LOWELL J BERG ; JOHN P NOVOTNY ; FORREST C MEYER ; DALLAS W MEYER

Agent(s): LAWRENCE RICHARD ANTHONY; GROSS FELIX; MUELLER WOLFRAM HUBERTUS; WORKMAN NYDEGGER,1000 EAGLE GATE TOWER; WORKMAN NYDEGGER 1000 EAGLE GATE TOWER; WEAVER AUSTIN VILLENEUVE AND SAMPSON LLP; MASCHOFF GILMORE AND ISRAELSEN; MASCHOFF BRENNAN; ISRAELSEN BURNS R; ISRAELSEN R BURNS; ISRAELSEN BURNS R ET AL; ISRAELSEN R BURNS ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: WIRELESS ENERGY TRANSFER SYSTEMS

Abstract: Source: US2010109445A Described herein are improved capabilities for a source resonator having a Q-factor Q1>100 and a characteristic size x1 coupled to an energy source, and a second resonator having a Q-factor Q2>100 and a characteristic size x2 coupled to an energy drain located a distance D from the source resonator, where the source resonator and the second resonator are coupled to exchange energy wirelessly among the source resonator and the second resonator.

Classifications:

International (IPC 8-9): A41D1/04 A42B3/04 A61B18/00 A61B19/00 A61N1/00 A61N1/378 B23P15/26 B60L1/00 B60L1/14 B60L11/00 B60L11/18 B60L3/00 B60L3/04 B60R16/03 B60S5/00 B65H75/14 C09D5/26 G05F1/67 G08B21/00 H01B9/02 H01F17/02 H01F17/06 H01F27/02 H01F27/08 H01F27/24 H01F27/28 H01F27/30 H01F27/42 H01F3/00 H01F37/00 H01F38/00 H01F38/14 H01F5/00 H01F5/02 H01F5/04 H01M10/46 H01M6/50 H01P7/00 H01P7/08 H01Q7/00 H02H11/00 H02J11/00 H02J17/00 H02J3/02 H02J3/38 H02J5/00 H02J7/00 H02J7/02 H02J7/35 H02M1/00 H02N6/00 H02S10/00 H02S40/30 H02S40/38 H02S99/00 H03B19/00 H03H1/00 H03H7/38 H03H7/40 H04B1/16 H04B1/3827 H04B5/00 H04M1/02 H04N5/63 H04N5/64 H04R25/00 H04R3/00 H04W52/00 H04W88/02 H05B37/00 H05K1/00 H05K1/11 H05K7/20 H2J7/02 (Advanced/Invention); A61B17/00 B60L11/18 B60L3/00 H01F3/00 H02J17/00 H02J5/00 H02J7/02 H02J7/35 H03B19/00 H03H7/38 H03H7/40 H04B5/02 (Advanced/Non-invention); H01F27/02 H01F27/42 H01F38/00 H01F38/14 H02J17/00 H03B19/00 (Core/Invention); H02J H02S (Subclass/Invention)

International (IPC 1-7): H02N6/00

CP: Y02B10/30 H02J7/045 Y02E70/30 H01Q1/02 H01Q7/08 H04B5/0012 H01F27/02 H01F27/34 H01Q1/248 H03H2001/0057 H04B5/0031 H04B5/0087 H02J3/32 B60L1/006 G06F1/266 B60L2230/16 H02J2007/0062 A61N1/3787 H01Q7/005 Y02T90/12 H01F5/003 H02J2007/0096 B60L1/00 G06F1/26 H04R3/00 H04R25/554 B60L3/00 H01F27/42 B60L2270/145 H02J7/0029 H02J7/0047 H01F37/00 H04B5/0075 H02J7/0013 H01F27/2804 A42B3/0406 H02J7/0054 H04B5/0093 H01F27/006 B60L11/1838 B60L2260/46 H02J7/0055 H01F27/24 H01F27/2823 A43B3/0015 A43B7/02 A43B7/04 Y10S323/911 H04W52/0277 H02J3/383 Y02E10/563 H02J7/35 H02J5/00 H04B5/0043 H01M10/46 B60L11/1812 B60L3/0069 B60L2240/525 B60L3/04 H04B5/0081 Y02T10/7094 Y02T10/7055 Y02B60/50 B60L2270/32 B60L11/1824 B60L3/003 B60L11/1831 B60L2200/18 B60L2200/40 B60L2200/42 B60L2230/30 B60L2230/32 B60L2240/36 B60L2240/527 B60L2240/529 B60L2240/662 B60L2240/72 H02J7/0027 Y02T10/7291 Y02T90/16 H02J7/00 A61B19/2203 A61B2017/00221 A61B2017/00367 Y10T29/4935 B60R16/03 B60N2002/0264 A61B2018/00196 B60L2200/36 B60L2230/14 H03H1/00 A61B18/00 H01F5/04 H01F5/02 B60L11/1833 B60L11/185 Y02T90/125 Y10T307/707 Y10T307/718 Y10T307/729 Y10T307/696 B60L11/1829 Y10T307/50 Y10T307/25 H01F2003/005 H04B5/0037 G05F1/67 H01F38/14 H02J7/025 B60L11/007 B60L2260/32 H04B1/3833 H04M1/0262 B60L11/182 B60L11/184 B60L11/1842 B60L11/1844 B60L11/1846 B60L11/1848 B60L2200/12 B60L2200/22 B60L2200/26 B60L2210/10 B60L2210/20 B60L2210/30 B60L2210/40 B60L2230/22 B60L2230/24 B60L2250/16 B60L2250/16 B60L2260/28 H01Q7/00 H03H7/40 Y02E60/721 Y02T10/7005 Y02T10/7088 Y02T10/7216 Y02T10/7241 Y02T10/725 Y02T90/121 Y02T90/122 Y02T90/127 Y02T90/128 Y02T90/14 Y02T90/163 Y02T90/169 Y04S10/126 Y04S30/14 H01F27/22 H02J17/00 H02J5/005

European: A61B19/22B B60L11/00B4 B60L11/18L2A B60L11/18L5 B60L11/18L7 B60L11/18L7C2 B60L11/18L7C2B B60L11/18L7C4 B60L11/18L7J B60L11/18L7J10 B60L11/18L7J12 B60L11/18L7J2 B60L11/18L7J4 B60L11/18L7J6 B60L11/18L7J8 B60L3/00 B60L3/00F12 B60L3/00F2 B60L3/04 G06F1/26P H01B1/02C H01F38/14 H01Q1/02 H01Q1/24E H01Q7/00 H01Q7/00B H01Q7/08 H02J17/00 H02J3/38D1S H02J5/00T H02J7/00C6 H02J7/00D H02J7/00F H02J7/02B1 H03H1/00 H03H7/40 H04B5/00C H04B5/00P2 H04B5/00P4 H04B5/00W2 H04B5/00W4 H04B5/00W6 K61B17/00C10 K61B17/00F L60L200/12 L60L200/18 L60L200/22 L60L200/36 L60L200/42 L60L200/46 L60L200/48 L60L200/50 L60L200/52 L60L200/54 L60L200/56 L60L200/58 L60L200/60 L60L200/62 L60L200/64 L60L200/66 L60L200/68 L60L200/70 L60L200/72 L60L200/74 L60L200/76 L60L200/78 L60L200/80 L60L200/82 L60L200/84 L60L200/86 L60L200/88 L60L200/90 L60L200/92 L60L200/94 L60L200/96 L60L200/98 L60L200/100 L60L200/102 L60L200/104 L60L200/106 L60L200/108 L60L200/110 L60L200/112 L60L200/114 L60L200/116 L60L200/118 L60L200/120 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EP2867978 A1 20150506
HK1200604 A1 20150807
IN00990KN2013 A 20130906
IN01734KN2011 A 20110902
IN02338MN2012 A 20140725
IN02874CN2013 A 20140711
IN03521KN2011 A 20120330
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RON FIORELLO ; QIANG LI ; MACDONALD MATTHEW J ; LAMENZA MICHAEL F ; KONRAD KULIKOWSKI ; BUENROSTRO CHRISTOPHER ; ARISTEIDIS KARALIS

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Agent(s): A J PARK ; AJ PARK ; WRAYS ; FREEHILLS PATENT ATTORNEYS ; DAVIES COLLISON CAVE ; SMART AND BIGGAR ; BORDEN LADNER GERVAIS LLP ; MARKS AND CLERK ; GOWLING LAFLEUR HENDERSON LLP ; NAISMITH ROBERT STEWART ; FINDLAY ALICE ROSEMARY ; Findlay Alice Rosemary ; ROUND EDWARD MARK ; SCHLEY JAN MALTE ; STRATEGIC PATENTS PC ; GTC LAW GROUP LLP AND AFFILIATES ; GTC LAW GROUP LLP AND AFFILITATES ; FISH AND RICHARDSON PC ; CKC AND PARTNERS CO LTD ; MAZZARESE ROBERT A ET AL ; NORTRUP JOHN H ET AL ; MONOCELLO JOHN A III ; MEYER STUART P ET AL ; AMBROZIAK JEFFREY ; AMBROZIAK JEFFREY R

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: TIGHTLY-COUPLED NEAR-FIELD COMMUNICATION-LINK CONNECTOR-REPLACEMENT CHIPS

Abstract: Source: US2010159829A Tightly-coupled near-field transmitter/receiver pairs are deployed such that the transmitter is disposed at a terminal portion of a first conduction path, the receiver is disposed at a terminal portion of a second conduction path, the transmitter and receiver are disposed in close proximity to each other, and the first conduction path and the second conduction path are discontinuous with respect to each other. In some embodiments of the present invention, close proximity refers to the transmitter antenna and the receiver antenna being spaced apart by a distance such that, at wavelengths of the transmitter carrier frequency, near-field coupling is obtained. In some embodiments, the transmitter and receiver are disposed on separate substrates that are moveable relative to each other. In alternative embodiments, the transmitter and receiver are disposed on the same substrate.

Classifications:

International (IPC 8-9): F01C1/356 F01C1/40 F01C21/08 F01C21/10 F03C2/30 F04C18/40 F04C2/356 F04C2/40 G06F1/16 G06F1/18 G06F13/00 G06F13/40 G06K19/07 G06K19/077 G09G3/20 G09G5/00 H01F38/14 H01F7/02 H01L23/00 H01L23/12 H01L23/31 H01L23/495 H01L23/66 H01L25/065 H01P3/12 H01P3/16 H01P5/02 H01Q1/22 H01Q1/38 H01Q1/50 H01Q13/02 H01Q23/00 H01Q7/00 H01Q9/26 H01R11/30 H01R13/62 H01R13/631 H01R13/64 H01R13/646 H03M3/02 H04B1/04 H04B1/38 H04B1/40 H04B13/00 H04B14/02 H04B14/06 H04B17/00 H04B17/309 H04B17/318 H04B5/00 H04B5/02 H04B7/00 H04B7/24 H04J3/16 H04L12/00 H04L12/12 H04L25/02 H04L25/40 H04L25/49 H04L27/00 H04L27/04 H04L29/02 H04L29/06 H04L5/14 H04Q5/22 H04R3/00 H04W4/00 H04W4/02 H04W76/02 H04W76/04 H05K9/00 (Advanced/Invention); G09G5/00 H01L23/31 H01L23/498 (Advanced/Non-invention); H04B5/00 (Core/Invention)

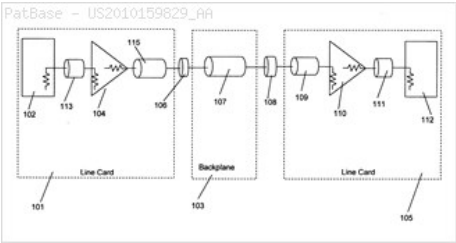
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European: H01L23/498L H01L23/66 H01Q7/00 H01Q9/26 H04B14/02 H04B5/00P2 H04B5/02 H04L25/49A H04L27/04 T01L23/498C4

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Family:

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Probable Assignee: KEYSSA INC

Assignee(s): (std): CHANG MAU CHUNG FRANK ; GREYSTONE TECHNOLOGIES PTY LTD ; ISAAC ROGER D ; KEYSSA INC ; MCCORMACK GARY D ; WAVECONNEX INC ; KYLES IAN A ; SOVERO EMILIO ; KIM YANGHYO ; WAVECONNEX INC A DELAWARE CORP

Inventor(s): (std): ISAAC ROGER ; KIM YANG HYO ; KIM YANGHYO ; KYLES IAN A ; ROGER D ISAAC ; SOVERO EMILIO ; WHEELER DARYL ; WOLCOTT JOHN ; MCCORMACK GARY DAVIS ; MCCORMACK GARY D ; ISAAC ROGER D ; SEITZ NORBERT ; NOVAK STEVE ; KVETON KEN ; BOURDESS MIKE ; MCCORMACK GRAY D ; BURNS SR TIMOTHY DONALD ; BURNS TIMOTHY DONALD SR ; CHANG MAU CHUNG FRANK ; ERWIN JUSTIN WADE

Inventor(s): GARY D MCCORMACK ; IAN A KYLES ; ROGER D

Agent(s): STAINTHORPE VANESSA JULIET ; HOFER AND PARTNER ; COLOMBO STEFANO PAOLO ; MORRALL JONATHAN IAN MCLACHLAN ; BOULT WADE TENNANT ; RAYMOND J WERNER ; KOLISCH HARTWELL PC ; FENWICK AND WEST LLP ; COOPER DAVID P ; LINDEN GERALD E ; VAN COURT ANDREW ET AL ; PATEL RAJIV P ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK
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PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ
VC VN ZA ZM ZW

Abstract: Source: US2010177080A A wireless electronic-ink based display device employing thermal packaging for cold outdoor-weather applications, comprising a power source module, a processor, a RF transceiver, and a power management module mounted on the first side of a printed circuit board (PCB) structure, while an addressable electronic-ink based display module is mounted on the second side of the PCB structure, and a thermal-insulation weather-sealed packaging is provided about the addressable electronic-ink based display structure and the PCB structure. To accommodate hot outdoor weather environments, a heat-dissipative thermal radiator is mounted to the first side of the PCB, and in thermal communication with the addressable electronic-ink based display structure and the PCB structure.

International (IPC 8-9): G06F3/038 G06F9/445 G08B17/00 G09G3/34 H04L12/24 H04L12/26 H04L12/28 H04L12/66 H04L29/08 H04W24/00 H04W4/00 H04W8/24 H04W84/18 H04W88/00 H04W88/16 H04W92/02 (Advanced/Invention); G06F3/147 G09G3/34 H04L12/28 H04W16/00 H04W84/10 H04W84/18 H05K5/00 (Advanced/Non-invention); H04W4/00 (Core/Invention)

European: G06F1/16P3 G06F1/16P9E G06F1/16P9P G06F3/147 H04L12/24C2
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H04L41/08A H04L41/12 H04L41/22 H04L43/08D H04W88/16 S09G380/04 S09G380/06
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Publication number	Publication date	Application number	Application date
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US2010177749 AA	20100715	US20090319903	20090113
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Assignee(s): (std): METROLOGIC INSTR INC

Assignee(s): METROLOGIC INSTRUMENTS INC

Inventor(s): (std): CHEN LIANGLIANG ; ESSINGER STEVEN ; LIU JIBIN ; LU JUN ; SCHMIDT MARK ; SCHNEE MICHAEL ; SHEN XIN ; SMITH TAYLOR ; ZHU XIAOXUN

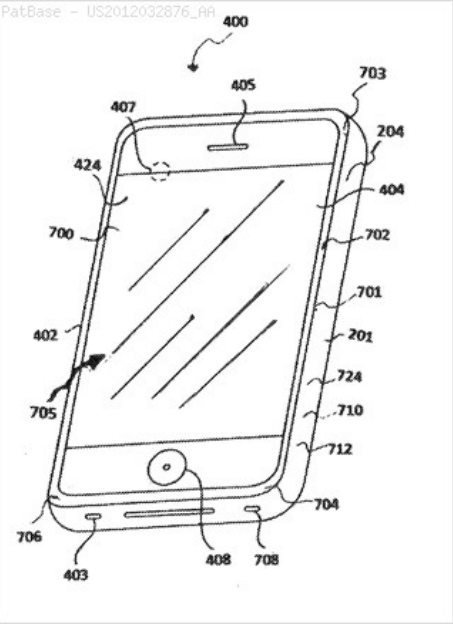
Agent(s): HALEY STEPHEN; HONEYWELL/PERKOWSKI,PATENT SERVICES; HONEYWELL PERKOWSKI PATENT SERVICES; ADDITON HIGGINS AND PENDLETON PA

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Title: MEGA COMMUNICATION AND MEDIA APPARATUS CONFIGured TO PROVIDE FASTER DATA TRANSMISSION SPEED AND TO GENERATE ELECTRICAL ENERGY

Abstract: Source: US2012032876A Disclosed embodiments comprise communication apparatus operatively configured with CMOS multiple antennas disposed on a chip for boosting communication signals to and for enabling faster data transmission speed and to provide interactive user interface. The communication apparatus is further configured to convert sound waves, vibrations, solar energy, wind force and pressure force into electrical energy communicable to a battery cell. Disclosed embodiment encompasses three modes of communications-the Cell phone, wireless Internet applications, and Global communication and media information. Embodiments provide communication apparatus operable to enhance mobile communication efficiency with touch sensitive display and provide energy harvesting platform on at least the housing for the apparatus and/or the circuit board configured with memories, processors, and modules. Embodiments provide advanced computing and media applications, including in-vehicle interactive communications and wireless Internet applications. Embodiments further provide a gaming device, a wireless media device configured with touch pads comprising sensors being embedded in silicon substrate and fused in micro fiber material having excellent electrical characteristics. Certain embodiments provide communication apparatus configured for voice enabled applications comprising human voice auditory operable to convert text into voice auditory and/or voice auditory into text applications.

Classifications:
International (IPC 8-9): G09G5/00 H01Q1/22 H01Q1/24 H01Q11/12 H01Q21/28 H04B1/3827 H04M1/00 H04W88/02 (Advanced/Invention); H04W88/02 (Advanced/Non-invention)
CPC: H01Q1/2283 H01Q1/243 H01Q1/245 H01Q21/28 H04W88/02 H04M1/0202 H04B1/3838 H04M1/00 H04M1/0214 H04M1/0235 H04M1/6083 H04M1/72522 H04M1/72536 H04M1/72558 H04M2250/10 H04M2250/12 H04M2250/22 H04W52/04
European: H04B1/38P2E H04M1/02A H04M1/60T2C2 H04M1/725F1 T04B1/38P2E T04M1/02A2B4 T04M1/02A2B8 T04M1/725F1E T04M1/725F1P T04M250/10 T04M250/12 T04M250/22 T04W88/02
US: 345/156 345/156P 455/127.1 455/127.100S 455/550.1 455/550.100S 455/566 455/566P 455/571 455/571S 455/572 455/572S



Family:

Publication number	Publication date	Application number	Application date
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Priority:
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Probable Assignee: TABE JOSEPH AKWO

Assignee(s): (std): TABE JOSEPH AKWO

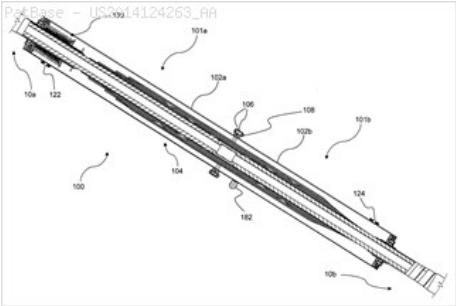
Inventor(s): (std): TABE JOSEPH AKWO

Agent(s): JOSEPH

Title: JOINT FOR HV CABLES INSULATED WITH IMPREGNATED PAPER OR PAPER-POLYPROPYLENE LAMINATE (PPL)

Abstract: Source: US2014124263A A method of jointing two high voltage impregnated cables may include exposing an impregnated cable insulation layer of cable ends by removing at least one protecting layer and an outer semiconducting layer; exposing a terminal length of conductors of the cable ends by cutting a portion of the impregnated cable insulation layer and by removing an inner semiconducting layer; mechanically and electrically connecting the conductors; filling at least in part a space left by the removed impregnated cable insulation layer with a conductive insert; providing an intermediate semiconducting layer to surround the conductive insert and abutting on portions of cable insulation layers adjacent to the conductive insert; applying a stratified insulation, impregnated with a second viscous compound, overlapping the exposed impregnated cable insulation layer of the cable ends and covering the intermediate semiconducting layer; electrically screening the conductors; and tightly containing the first and/or second viscous compounds.

Classifications:
International (IPC 8-9): H02G1/14 H02G15/184 H02G15/24 (Advanced/Invention)
CPC: H02G15/184 H02G1/14 H02G15/24 Y10T29/49195
European: H02G15/24
US: 174/88R 29/869



Family:

Publication number	Publication date	Application number	Application date
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Priority:
WO2011EP00982 20110301

Probable Assignee: PRYSMIAN SPA

Assignee(s): (std): LADIE PIERLUIGI ; PRIZMIAN S P A ; PRYSMIAN SPA ; RAVASIO MARIO
PRIZMIAN SPA ; PRYSMIAN S P A

Inventor(s): (std): LAD E P ERLUIDZHI ; LADIE PIERLUIGI ; RAVASIO MARIO ; RAVAZIO MARIO

Agent(s): RICCARDI ELISA; RICCARDI ELISA ET AL

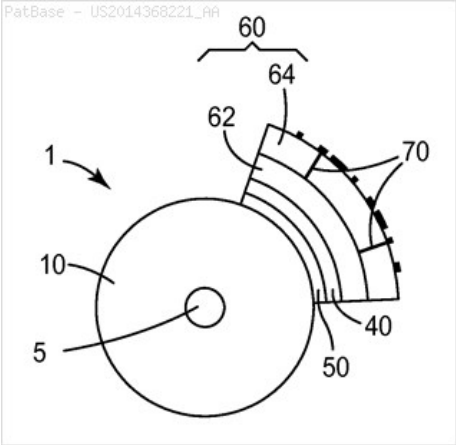
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Title: SENSORED CABLE FOR A POWER NETWORK

Abstract: Source: US2014368221A Sensored cable (1) for distribution of electrical power in a power network, the sensored cable comprising an inner conductor and an insulating layer (10) arranged concentrically around at least an axial section of the inner conductor. The sensored cable further comprises a capacitive voltage sensor (100) for sensing a voltage of the inner conductor, characterized by the sensor including a printed circuit board element (60), which is placed over an electrically isolated piece (140) of conductive or semiconductive material, arranged on the insulating layer of the cable. The electrically isolated piece (140) of conductive or semiconductive material is operable to form an electrode of a sensing capacitor of the capacitive voltage sensor. The cable may comprise a (semi-) conductive layer (20). The electrically isolated piece (40) of conductive or semiconductive material may comprise a portion of the (semi-) conductive layer.

Classifications:

International (IPC 8-9): G01R15/06 G01R15/14 G01R15/16 G01R15/18 G01R19/00 G01R19/165 H01B9/00 H01R13/58 H01R13/66 H01R4/18 H01R43/26 H02G15/064 H02G15/08 H02G15/18 H02G15/184 (Advanced/Invention); G01R15/18 (Advanced/Non-invention)
CPC: G01R15/142 G01R15/181 G01R15/06 G01R19/0084 H01B9/006 H01R13/5845 H01R13/6683 H01R43/26 G01R15/16 H02G15/184 Y10T29/49208
US: 29/876 324/658 439/471



Family:

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Probable Assignee: 3M INNOVATIVE PROPERTIES CO

Assignee(s): (std): BOLCATO GIULIANO ; EGGERT SEBASTIAN ; GRAVERMANN MARK ; WEICHOLD JENS ; WEINMANN CHRISTIAN ; STALDER MICHAEL ; KURZHALS HOLGER ; ZANOLI PASQUALE ; 3M INNOVATIVE PROPERTIES CO

Assignee(s): 3M INNOVATIVE PROPERTIES CO3M CENTERP.O. BOX 33427SAINT PAULMN55133-3427US ; 3M INNOVATIVE PROPERTIES COMPANY

Inventor(s): (std): BOLCATO GIULIANO ; EGGERT SEBASTIAN ; GRAVERMANN MARK ; KURZHALS HOLGER ; KURZHALS HOLGER J ; STALDER MICHAEL ; STALDER MICHAEL H ; STALDER MICHAEL HEINZ ; WEICHOLD JENS ; WEINMANN CHRISTIAN ; ZANOLI PASQUALE ; ZANOLI PASQUALE J

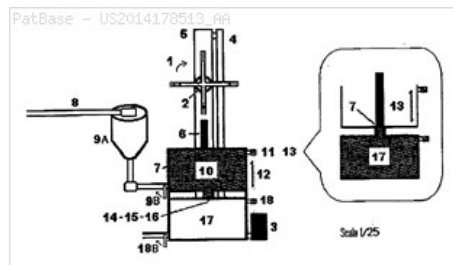
Inventor(s): ZANOLI PASQUALEIT ; WEINMANN CHRISTIANDE ; WEICHOLD JENSDE ; STALDER MICHAELDE ; KURZHALS HOLGERDE ; MARK GRAVERMANN ; MICHAEL STALDER ; PASQUALE ZANOLI ; SEBASTIAN EGGERT ; GRAVERMANN MARKDE ; HOLGER KURZHALS ; JENS WEICHOLD ; EGGERT SEBASTIANDE ; GIULIANO BOLCATO ; BOLCATO GIULIANOIT ; CHRISTIAN WEINMANN

Agent(s): DAVIES COLLISON CAVE; SMART AND BIGGAR; JUAN PABLO CADENA SARMIENTO; BERGEN KATJA; DE ELZABURU ALBERTO; GOVER MELANIE G ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Abstract: Source: US2014178513A The variable hydraulic press and distillation reservoir process scientific formula non ionic or electrolyte mechanically refined and nanoparticle dispersion preform slurry extrusion with or without ionic suspension Preform slurry high wear-heat resistant parts electronic composite coils, windings, annealing, drawn, spun, coils, windings, wire, woven textile mesh, shielding, parts brushes, inductors, antinode couplers, electric rheostats, starters, motors, alternators, generators, ionic suspension enhanced composite coils, composite windings, spun wound coils and windings beryllium Be4, magnesium Mg12, copper Cu29 and carbon nanofoam C6, electronic parts capacitors, ionic suspension circuit battery cells, electronic parts rheostats, resistors, transformers, transducers, rectifiers, power supplies, or heat sinks Preform slurry high wear-heat resistant parts aerospace, automotive, and transportation **brake** calipers, rotors, pads, and bushings Preform slurry non ionic or electrolyte mechanically refined and nanoparticle high wear-heat resistant parts precision casting molds 2.5 phase die cast molding Building Materials fine concrete, mortar, brick, and tiles.

US: 425/6



Publication number	Publication date	Application number	Application date
US2014178513 AA	20140626	US20120726531	20121224

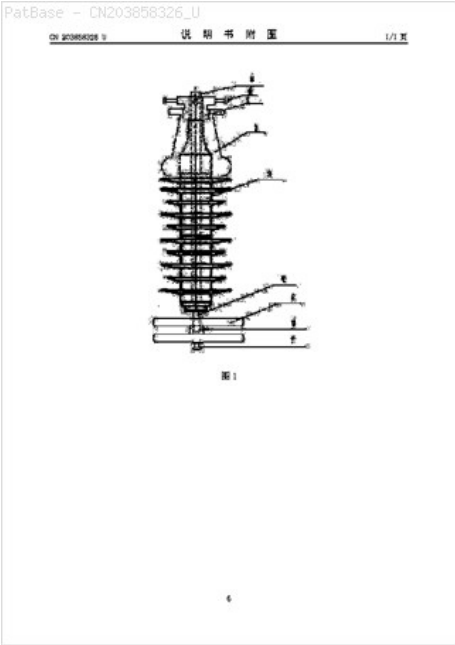
US20120726205 20121223 US20120726531 20121224

Inventor(s): (std): MATTHEWS ROBERT RICHARD

Title: TERMINAL FOR TESTING PARTIAL DISCHARGE OF 35KV OR LOWER STRESS RING-OIL SEAL TYPE CROSSLINKED POLYETHYLENE POWER CABLE

Abstract: Source: CN203858326U The utility model relates to a terminal for testing partial discharge of a 35kV or lower stress ring-oil seal type crosslinked polyethylene power cable. The terminal comprises a stress ring, a voltage-sharing sleeve and a high-voltage connecting voltage-sharing ring, wherein the stress ring is composed of an inner ring and an outer ring; the inner ring is fixed to a cable shielding layer through screws; the voltage-sharing sleeve sleeves an insulating cable core, a semi-conductive interface of the voltage-sharing sleeve is connected with the lower end of the inner ring, and the voltage-sharing sleeve is further provided with 5-16 umbrella skirts; the lower end of the voltage-sharing sleeve is provided with a cable conductor connecting end, and the cable conductor connecting end is connected with a wire core conductor of the insulating cable core; the upper end of the high-voltage connecting voltage-sharing ring is connected with the cable conductor connecting end, the lower end of the high-voltage connecting voltage-sharing ring is provided with a high-voltage connector connected with a high-voltage cable, and the high-voltage connecting voltage-sharing ring is provided with inner screws which enable the high-voltage connecting voltage-sharing ring to be connected with the cable conductor connecting end; and the voltage-sharing sleeve is internally provided with high voltage resistant oil in a sealed mode. The test terminal can be conveniently and rapidly installed, material consumption is low, and the terminal can be repeatedly used. The peeling and cutting length of the ends of the crosslinked polyethylene power cable is decreased, time for peeling and cutting the cable and installing the terminal is effectively shortened, and the test efficiency is improved.

Classifications:
International (IPC 8-9): G01R31/12 (Advanced/Invention)



Family:

Publication number	Publication date	Application number	Application date
CN203858326 U	20141001	CN201420156558U	20140402

Priority:
CN201420156558U 20140402

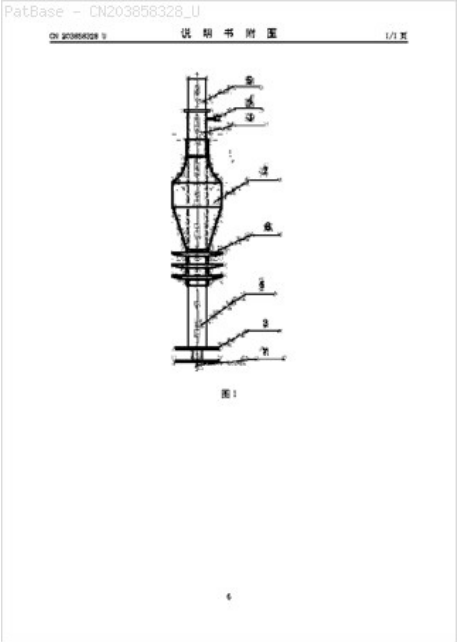
Probable Assignee: SHANGHAI HUAPU CABLE CO LTD
Assignee(s): (std): SHANGHAI HUAPU CABLE CO LTD
Assignee(s): SHANGHAI MAPLE CABLE CO LTD ; SHANGHAI HUAPU CABLE CO
Inventor(s): (std): DING JIE ; HU NIU ; LI SHAOHUA ; WANG CHUNHUI ; ZHANG MINGJIE ; ZHOU YAN

Title: TERMINAL FOR TESTING PARTIAL DISCHARGE OF 10KV OR LOWER CROSSLINKED POLYETHYLENE POWER CABLE

Abstract: Source: CN203858328U The utility model relates to a terminal for testing partial discharge of a 10KV or lower crosslinked polyethylene power cable, which comprises a stress ring, a voltage-sharing sleeve and a high-voltage connecting voltage-sharing ring, wherein the stress ring is provided with screws enabling the stress ring to be fixed to a cable shielding layer; the lower end of the stress ring is sleeved at a joint of the cable shielding layer and an insulator, the voltage-sharing sleeve sleeves an insulating cable core, a semi-conductive interface of the voltage-sharing sleeve is connected with the lower end of the stress ring, and the voltage-sharing sleeve is provided with 2-4 umbrella skirts; the upper end of the high-voltage connecting voltage-sharing ring is connected to a cable core conductor of the insulating cable core, the high-voltage connecting voltage-sharing ring is provided with screws enabling the high-voltage connecting voltage-sharing ring to be fixed to a cable conductor, and the lower end of the high-voltage connecting voltage-sharing ring is provided with a high-voltage connector connected with a high-voltage cable. The test terminal can be installed conveniently and rapidly, material consumption is low, and the terminal can be used repeatedly. The peeling and cutting length of the crosslinked polyethylene power cable is decreased, time for peeling and cutting the cable and installing the terminal is effectively shortened, the test efficiency is improved, damages caused by adopting a Freon terminal for the environment are avoided, and the test stability is improved compared with an oil terminal.

Classifications:

International (IPC 8-9): G01R31/12 (Advanced/Invention)



Family:

Publication number	Publication date	Application number	Application date
CN203858328 U	20141001	CN201420157642U	20140402

Priority:

CN201420157642U 20140402

Probable Assignee: SHANGHAI HUAPU CABLE CO LTD

Assignee(s): (std): SHANGHAI HUAPU CABLE CO LTD

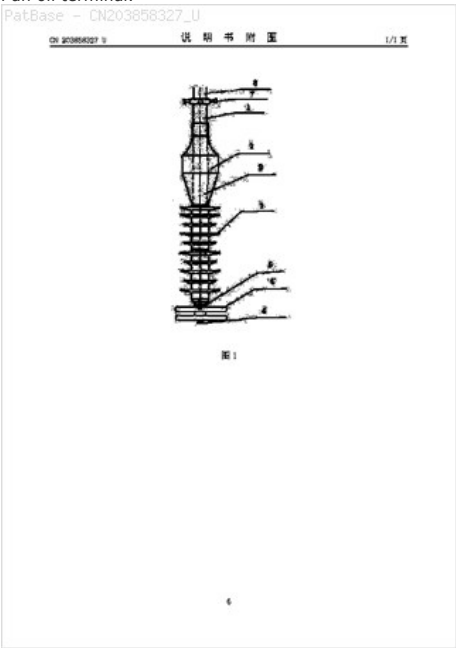
Assignee(s): SHANGHAI MAPLE CABLE CO LTD ; SHANGHAI HUAPU CABLE CO

Inventor(s): (std): DENG MINGFENG ; GAO QING ; LU DINGWEI ; SHI YI ; ZHANG MINGJIE ; ZHOU YAN

Title: TERMINAL FOR TESTING PARTIAL DISCHARGE OF 35KV OR LOWER CROSSLINKED POLYETHYLENE POWER CABLE

Abstract: Source: CN203858327U The utility model relates to a terminal for testing partial discharge of a 35kV or lower crosslinked polyethylene power cable, which is characterized by comprising a stress ring, a voltage-sharing ring and a voltage-sharing connecting voltage-sharing ring, wherein the stress ring is provided with screws enabling the stress ring to be fixed to a cable shielding layer; the lower end of the stress ring is sleeved at a joint of the cable shielding layer and an insulator, the voltage-sharing sleeve sleeves an insulating cable core, a semi-conductive interface of the voltage-sharing sleeve is connected with the lower end of the stress ring, and the voltage-sharing sleeve is provided with 5-16 umbrella skirts; the upper end of the high-voltage connecting voltage-sharing ring is connected to a cable core conductor of the insulating cable core, the high-voltage connecting voltage-sharing ring is provided with screws enabling the high-voltage connecting voltage-sharing ring to be fixed to a cable conductor, and the lower end of the high-voltage connecting voltage-sharing ring is provided with a high-voltage connector connected with a high-voltage cable. The test terminal can be conveniently and rapidly installed, material consumption is low, and the terminal can be repeatedly used. The peeling and cutting length of the ends of the crosslinked polyethylene power cable is decreased, time for peeling and cutting the cable and installing the terminal is effectively shortened, the test efficiency is improved, damages caused by adopting a Freon terminal to the environment are avoided, and the test stability is improved compared with an oil terminal.

Classifications:
International (IPC 8-9): G01R31/12 (Advanced/Invention)



Family:

Publication number	Publication date	Application number	Application date
CN203858327 U	20141001	CN201420157636U	20140402

Priority:
CN201420157636U 20140402

Probable Assignee: SHANGHAI HUAPU CABLE CO LTD
Assignee(s): (std): SHANGHAI HUAPU CABLE CO LTD
Assignee(s): SHANGHAI MAPLE CABLE CO LTD ; SHANGHAI HUAPU CABLE CO
Inventor(s): (std): GAO ZHIQIANG ; MIAO SEN ; SHI WEIDONG ; ZHANG MINGJIE ; ZHOU YAN

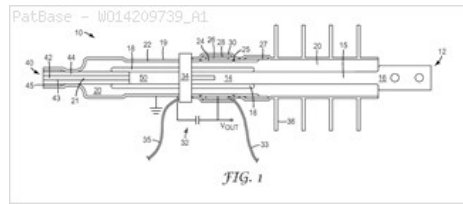
Title: POWER CABLE TERMINAL CONNECTION DEVICE

Abstract: A terminal connection device comprises a contiguous body disposed onto an inner conductor. The inner conductor includes a first end mateable with a power cable connector and a second end. The body comprises a multilayer structure having an inner conductive or semiconductive layer disposed over at least a portion of the power cable connector, an insulating layer and an outer conductive or semiconductive layer. The body surrounds the first end of the inner conductor and extending towards the second end of the inner conductor. The body can also include an electrically isolated section of conductive or semiconductive material. The terminal connection device can be a fully integrated structure, having a pre-installed connection interface, or the terminal connection device can be configured as an adapter which can be mounted in the field to a connection interface.

Classifications:

International (IPC 8-9): H02G15/08 (Advanced/Invention)

CPC: H02G15/068 H02G1/14



Family:

Publication number	Publication date	Application number	Application date
TW201515353 A	20150416	TW20140121970	20140625
WO14209739 A1	20141231	WO2014US43137	20140619

Priority:

US20130839543P 20130626

Probable Assignee: 3M INNOVATIVE PROPERTIES CO

Assignee(s): (std): 3M INNOVATIVE PROPERTIES CO

Inventor(s): (std): BENSON MICHAEL D ; BENSON MICHAEL DAVID ; BIYIKLI LEVENT ; BOLCATO GIULIANO ; BOLCATO GIULIANO ; GRAVERMANN MARK ; LOYD JAYLON D ; LOYD JAYLON DAVID ; MAHONEY DAVID V ; MAHONEY DAVID VINCENT ; SEBESTA CHRISTOPHER D ; SEBESTA CHRISTOPHER DANIEL ; WEICHHOLD JENS ; WENTZEL CARL J ; WENTZEL CARL JACOB

Agent(s): ROSENBLATT GREGG H ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW