



New connection on: : 29-06-2018 : 03:12:03 - Last disconnection on: : 28-06-2018 : 22:04:44

V 4.0.0.44358(LP,U,linux) (Rev:43856 2017-04-27 09:03:29 +0200#(D201802)) (RPM D201802)

Welcome to EPOQUE Rebuild under the Production Environment

[EPODOC: SS 9] card and (ceramic or (metal and oxide)) and (cavity or pocket or space or hole or pouch or chamber or compartment)

Results in EPODOC 337

[SS 10] 9 and (zirconia or alumina or beryllia or ceria or ceramide or carbide or boride or nitride or silicide)

Results in EPODOC 14

[SS 11] 10 and pd<20141111

Results in EPODOC 7

[SS 12] ..li



1/7 © EPODOC / EPO

PN - [TW201341805](#) A 20131016

PNFP - TWI477782B B 20150321

PR - JP20120008505 20120118

AP - TW20130101937 20130118

DT - I

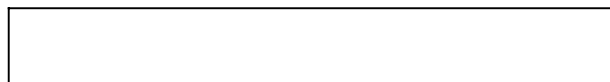
CCI - [G01R1/07378](#) ; [G01R31/2889](#)

CQI - [G01R1/07307](#)

PA - (A B)
NHK SPRING CO LTD [JP]

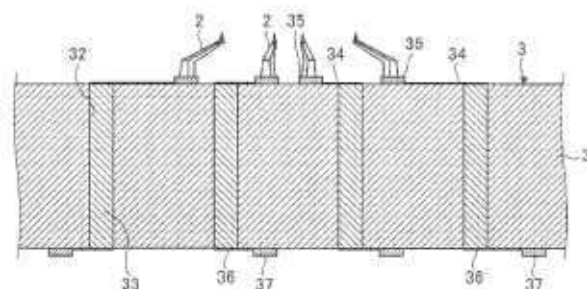
TI - (A B)
Wiring **space** transformer and
probe **card**

AB - (A)
This invention provides a
wiring **space** converter having a
coefficient of thermal expansion
similar to that of silicon, having
simple structure, and is suitable



for large caliber, as well as a probe **card** having such a wiring **space** converter. The wiring **space** converter comprises a **ceramic** substrate formed by a sintered body containing an enstatite and a boron **nitride** as constitution components. The boron **nitride** is oriented in one direction and through-holes are formed in the thickness direction penetrating through the sintered body, and the through-holes are filled with a conductive material. The **ceramic** substrate has two main surfaces each provided with a wiring pattern containing a plurality of electrodes; the spacing between the electrodes in wiring pattern on one main surface is different from that on the other main surface.

- 2/7** © EPODOC / EPO
- PN - [WO2013108759](#) A1 20130725
- PR - JP20120008505 20120118
- AP - WO2013JP50593 20130115
- DT - **
- CT - [JP] ISR (A1)
[JP2010275149](#) A 20101209
[Y] (NHK SPRING CO LTD);
[JP2004336062](#) A 20041125
[Y] (FORMFACTOR INC);
[JP2002050869](#) A 20020215
[Y] (KYOCERA CORP);
[WO2007142204](#) A1 20071213
[Y] (NHK SPRING CO LTD [JP], et al);
[JP2008024530](#) A 20080207
[Y] (TOTO LTD);
[JP2012020901](#) A 20120202
[AP] (NHK SPRING CO LTD)
- CCI - [G01R1/07378](#) ; [G01R31/2889](#)
- CQI - [G01R1/07307](#)
- PA - NHK SPRING CO LTD [JP]
- TI - **SPACE TRANSFORMER AND**



PROBE CARD

- AB - Provided are: a **space** transformer that has a coefficient of thermal expansion close to silicon, and that has a simple structure and is suitable for large diameters; and a probe **card** equipped with said **space** transformer. Enstatite and boron **nitride** are included as constituents, and through-holes, which pass through in the thickness direction of a sinter in which the boron **nitride** is oriented in one direction, are formed. A **ceramic** substrate obtained by filling the through-holes with a conductive material is provided. The two main surfaces of the **ceramic** substrate are each provided with a wiring pattern that includes a plurality of electrodes. The spacing of the electrodes in the wiring of one main surface differs to the spacing of the electrodes in the wiring pattern of the other main surface.

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- PN - [CN202254808U](#) U 20120530
- PR - CN20112389859U 20111014
- AP - CN20112389859U 20111014
- DT - I
- PA - HEFEI KEJING MATERIALS TECHNOLOGY CO LTD
- TI - Openable high-temperature tubular furnace with wide operating temperature range
- AB - The utility model discloses an openable high-temperature tubular furnace with wide operating temperature range, which comprises a furnace body; a through central channel is set in a heating **cavity** in the middle part of the furnace body, a furnace tube is installed in the central channel, the heating **cavity** comprises an **alumina** furnace lining, silicon **carbide** rods are set in the **alumina** furnace lining uniformly, one end of each silicon **carbide** rod is connected with a power interface via a wire; and the furnace tube is a mullite furnace; or **zirconia ceramic** cards are set in the **alumina** furnace lining in intervals, a silicon molybdenum rod is fixedly set on each **zirconia ceramic card**, one end of each silicon molybdenum rod is connected with a power interface via a wire; and the furnace tube is an **alumina** furnace tube. The openable high-temperature tubular furnace with wide operating temperature range improves highest continuous operating

temperature of openable tubular furnace by using silicon **carbide** rods and silicon molybdenum rods as the heating source for substituting for traditional resistance wires. And the openable high-temperature tubular furnace with wide operating temperature range not only guarantees heat stability, but also prolongs service lives of the heating element and the furnace tube by changing and setting relative furnace tube and fixed element.

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PN - [JPH04357099](#) A 19921210

PR - JP19910072987 19910405

AP - JP19910072987 19910405

DT - I

FI - B42D15/10&360; B42D15/10&369; B42D15/10&501E; B42D25/36; B42D25/369; G06K19/00&B; G06K19/02; G06K19/06&187; G11B5/72; G11B5/80

FT - 2C005/BA01; 2C005/CB04; 2C005/DA02; 2C005/DA04; 2C005/DA10; 2C005/HA30; 2C005/HB04; 2C005/JA01; 2C005/KA01; 2C005/KA15; 2C005/KA70; 2C005/KB17; 2C005/LA01; 2C005/LA05; 2C005/LA18; 2C005/LB04; 2C005/LB18; 5B035/AA03; 5B035/AA11; 5B035/BA03; 5B035/BA05; 5B035/BB02; 5D006/AA01; 5D006/AA04; 5D006/DA01

PA - DAINIPPON INK & CHEMICALS

TI - MAGNETIC **CARD** HAVING POLISHING PROPERTIES

AB - PURPOSE:To ensure that the magnetic head of a terminal device is not damaged and a contaminant is removed to prevent a write and read error occurrence by providing a polishing layer containing a **metal oxide** such as silica or **alumina** on a magnetic layer. CONSTITUTION:The subject magnetic **card** consists of a sheet-like or a plate-like base, a magnetic layer formed on the base and a polishing layer formed on the magnetic layer. Especially the polishing layer containing silica and a **metal oxide** selected from among **alumina**, titanium **oxide**, chromium **oxide** and ferric **oxide** is provided on the magnetic layer. The polishing layer has a film whose thickness ranges from 1 to 9μm. In addition, the blend ratio of silican and the **metal oxide** in the polishing layer ranges from 3 to 50wt.%. Subsequently, a contaminant sticking to a magnetic head can be removed without damaging the magnetic head. Further, the contaminant does not cause a **space** loss with the magnetic head and therefore, the output variation rate of the magnetic **card** does not deteriorate.

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PN - [JPH11192155](#) A 19990721

PR - JP19980001089 19980106

AP - JP19980001089 19980106

DT - I

FI - A47G33/00&J; B42D15/00&341B; B42D15/02&521; B42D15/10&200; B42D15/10&551A; B42D25/20

FT - 2C005/HA30; 2C005/HB05; 2C005/HB13; 2C005/HB14; 2C005/HB20; 2C005/JA09; 2C005/KA03; 2C005/KA07; 2C005/KA40; 2C005/KB05; 2C005/LA01; 2C005/LA11; 2C005/UA01; 2C005/UA05

PA - SANKEN KOGYO KK

TI - PERSONAL ORNAMENTS

AB - PROBLEM TO BE SOLVED: To effectively achieve the photocatalyst effect or the like by titanium **oxide**, and the disease curing effect or the like by titanium **carbide**, to reduce the odor such as the personal odor or the like and to maintain the health by coating a base surface with titanium **oxide** particles and titanium **carbide** particles in the personal ornaments such as a key holder or the like. SOLUTION: A base 1 of name **card** size is formed by various kinds of materials such as paper, plastic, **metal**, composite material or the like, and one face (surface) of the base 1 is coated with titanium **oxide** particles 2a and titanium **carbide** particles 2b. The coating 2 is formed in such a manner that it is positioned at the body side when it is placed in, for example, a **pocket**. Thereby the ornaments are useful for the photocatalyst, antibacterial or pollutin control effects and the reduction of the smell and nicotine of cigarette, the odor such as the personal odor or the like by the titanium **oxide** particles 2a, and the metabolism, the muscle relaxation, the reinforcement, the recovery from fatigue, the maintain of health or the like by the titanium **carbide** particles 2b.

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PN - [GB1251501](#) A 19711027

PR - US19670673900 19671009; US19680729859 19680410

AP - GB19680047871 19681009

DT - **

CCI - [B23Q3/086](#) ; [B65H41/00](#) ; [H01L21/78](#) ; [H01L23/29](#) ; [H01L21/00](#) ; [H01L21/6835](#)

CLC - [H01L2924/0002](#) , [H01L2924/00](#) , ADD

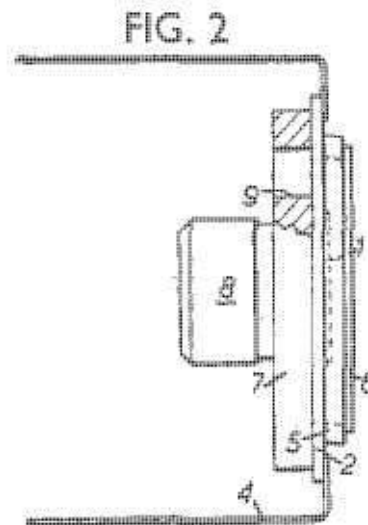
CCA - [H01L2221/68313](#) ; [H01L2924/0002](#) ; [Y10T428/24273](#) ; [Y10T428/265](#)

AB - 1,251,501. Semi-conductor device handling. WESTERN ELECTRIC CO. Inc. 9 Oct., 1968 [9 Oct., 1967; 10 April, 1968], No. 47871/68. Heading H1K. Pressure is applied between an array of beam lead semi-conductor devices and a pressure sensitive silicone resin or rubber so that the array is held by vacuum resulting from the pressure to a carrier part at least of the surface of which is constituted by said resin or rubber. In the manufacture of beam lead transistors a semi-conductor wafer containing a number of transistor zone configurations is stuck beam leads downwards by wax on a plate of glass, **alumina** or sapphire and subdivided into individual elements by photoresist and etching steps. The plate is mounted on a pedestal, a metal mesh screen clamped over it and cellulose acetate or nitrate applied to hold the wafer to the screen. After heating to soften the wax the plate is removed and any residual wax removed by immersing in and then spraying with trichloroethylene. Then the exposed face of the wafer is pressed against a pressure sensitive coating of adhesive silicone resin or rubber on a glass disc and the cellulose acetate dissolved in acetone to release the screen. Alternatively water is sprayed on the screen, frozen to clamp the devices thereto and then melted to release the screen. The transistors are individually removable from the disc using tweezers or a vacuum probe. Adhesion may be reduced by using a thinner layer of adhesive or by roughening its surface as by forming a matrix of depressions therein. Devices may be transferred from a less to a more adhesive surface merely by pressing them against the latter and then stripping off the former, the first carrier being stretched if desired, before transfer to **space** out the transistors. Alternatively a surface of the same adhesive power is pressed on and the adhesion of the first surface reduced by spraying it with

trichloroethylene to swell it. This spraying technique may also be used to weaken the adhesion and thus facilitate removal of individual transistors, the reduced adhesion persisting after the solvent has evaporated. In another embodiment the transistors are tested while held by wax on the original substrate, a plastics **card** with holes punched at the positions of transistors passing the test placed over the substrate and pressuresensitive adhesive applied in a fluid state to form a layer with protrusions contacting the transistors through the holes, and then cured. After dissolving the wax to dislodge the defective transistors a pressure adhesive member is pressed against the remaining transistors and the adherent coating and plastics **card** peeled off. In yet another arrangement the original support to which the wafer is stuck with wax has a pressure-sensitive adhesive surface. In this case the assembly is held under pressure while the wax is dissolved away to adhere the transistors to the surface. In a modification the original support is a **ceramic** carrier with frustoconical openings over which the transistor configurations are centred. After attaching the wafer with wax, the wax is locally removed by spraying solvent into the holes and replaced by the pressure-sensitive adhesive material in the fluid state, which on curing forms a sheet with protrusions contacting the transistors through the openings. The transistors are then separated by etching and the remaining wax removed.

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PN - [GB1268354](#) A 19720329
 PR - GB19680034247 19680718
 AP - GB19680034247 19680718
 DT - *
 CCI - [H01L23/057](#) ; [H01L23/36](#) ;
[H01L23/498](#)
 CLC - [H01L2924/0002](#) , [H01L2924/00](#) ,
 ADD
 CCA - [H01L2924/0002](#) ;
[H01L2924/01079](#)
 PA - PLESSEY CO LTD
 TI - IMPROVEMENTS IN OR RELATING
 TO INTEGRATED CIRCUIT DEVICES
 AB - 1,268,354. Semi-conductor
 devices. PLESSEY CO. Ltd. 13 June,
 1969 [18 July, 1968], No.
 34247/68. Heading H1K. An
 integrated circuit 1 which may
 comprise an integrated
 photodiode array and shift
 register is joined in thermally
 conductive fashion to a **beryllia**
ceramic plate 2. The **beryllia** plate
 2 may be provided with gold
 lands 3 (Fig. 1, not shown)
 formed by electroplating on an
 initial fired-on gold pattern.



Berylliumcopper alloy leads 4 may be welded to the lands and are bent to the shape shown after they have been severed from a lead-frame. The **beryllia** plate 2 is joined in thermally conductive fashion to a metal heat sink 7 provided with a boss 8 by which the circuit may be mounted in a metal camera body (Figs. 5-8, not shown) to form a pattern recognition device or **card** reader. The **hole** 9 receives a locating peg on the camera body. The leads 4 are received by sockets in a printed circuit board and are soldered into these. Leads from the printed circuit terminate at a plug mounted on the camera body.