

25 Documents

Publication numbers	Title	Current assignees
WO2011127414 A2	Electromagnetic forming of metallic glasses using a capacitive discharge and magnetic field	CALIFORNIA INSTITUTE OF TECHNOLOGY
WO201251443 A2	Forming of metallic glass by rapid capacitor discharge forging	CALIFORNIA INSTITUTE OF TECHNOLOGY
WO2009117735 A1	Forming of metallic glass by rapid capacitor discharge	CALIFORNIA INSTITUTE OF TECHNOLOGY
WO2012112656 A2	Injection molding of metallic glass by rapid capacitor discharge	CALIFORNIA INSTITUTE OF TECHNOLOGY
WO201292208 A1	Sheet forming of metallic glass by rapid capacitor discharge	CALIFORNIA INSTITUTE OF TECHNOLOGY
WO2006112478 A1	Metal base circuit board, led, and led light source unit	DENKA
US20140178513 A1	Non ionic/electrolyte, liquid/gaseous, mechanically refined/nanoparticle dispersion Building Materials/High Wear-Heat Resistant Part Brushes, Windings, Battery Cells, Brake Pads, Die Cast Molding , Refrigeration, Polarized/Integrated Optical, Spectrometric Processors, Central Processor Unit Processors, Electronic Storage Media, Analogous Series/Parallel Circuit Generators/Transceivers, Particulate Matter PM Carbonaceous-Polyamide, Crystalline Silica, and Cellulosic Filament Extraction/Miners Suit	MATTHEWS ROBERT RICHARD
EP-596249 A2	Current lead for a superconducting magnet system free from liquid helium	SUMITOMO HEAVY INDUSTRIES
WO9514314 A1	Interconnection element and method of fabrication thereof	CASCADE MICROTECH, ...
EP1445834 A2	Oxide superconductor current lead and method of manufacturing the same, and superconducting system	CHUBU ELECTRIC POWER, ...
IT-973940 B	Process for producing ingots by electric resistance melting particulate metal under slag	CENTRO SPERIMENTALE METALLURGICO
WO200034539 A1	Composite material and use thereof	HITACHI
WO200417850 A1	Catheter for treating irregular heart pulse	TORAY INDUSTRIES
JP10027708 A	Oxide superconductor current lead and method of manufacturing the same	DOWA ELECTRONICS MATERIALS
WO2007122736 A1	Casting method	EBIS
JP2004160462 A	Method and device for electrically hot-forming metallic bulk material	SINTOKOGIO
WO9612316 A1	Fuel cells employing integrated fluid management platelet technology	H POWER
WO200823839 A1	Asymmetric electronic component	C O POLYPLASTICS
WO200381695 A1		

Publication numbers	Title	Current assignees
	Battery pack	PANASONIC
JP2013213252 A	Quenching device	DAIHATSU MOTOR
WO2004100295 A1	Composite porous body, member for gas diffusion layer, cell member, and their manufacturing methods	mitsubishi materials
BE-719167 A	Electroslag refining apparatus	BOEHLER
CN107262686 A	Equipment and method for manufacturing composite steel ingot	NORTHEASTERN UNIVERSITY
WO201127815 A1	Organic el element sealing member	THREEBOND FINE CHEMICAL
WO200369698 A1	Battery and method of manufacturing the battery	PANASONIC

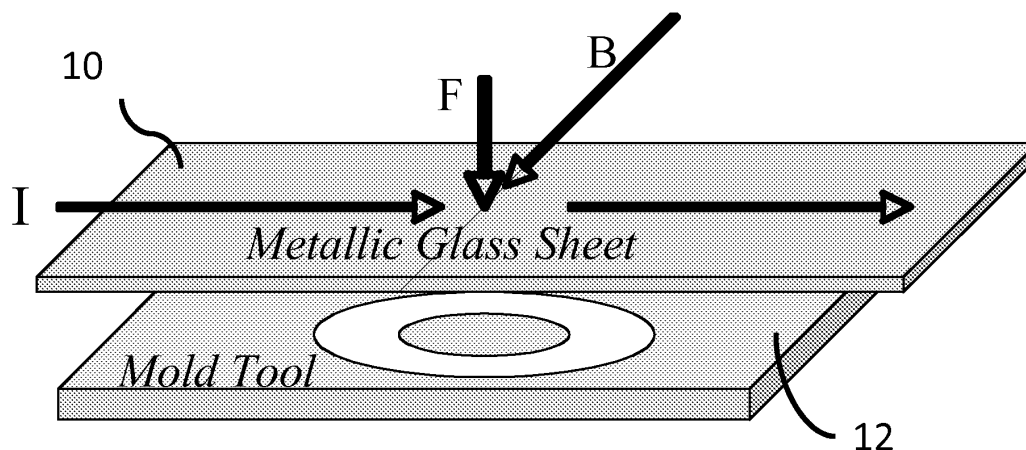
Family 1/25 - FAMPAT - ©Questel

Title

(EP2556178)

Electromagnetic forming of metallic glasses using a capacitive discharge and magnetic field

Images



Publication data including kind & date

WO2011127414	A2	2011-10-13	WO2011127414				
US20120006085	A1	2012-01-12	US20120006085				
WO2011127414	A3	2012-04-19	WO2011127414				
AU2011237361	A1	2012-11-01	AU2011237361				
KR20130002342	A	2013-01-07	KR20130002342				
CN102892915	A	2013-01-23	CN102892915				
EP2556178	A2	2013-02-13	EP2556178				
MX2012011678	A	2013-03-20	MX2012011678				
IN3042/KOLNP/2012	A	2013-06-21	IN2012KN03042				
BR112012025734	A1	2013-06-25	BR112012025734				
JP2013530045	A	2013-07-25	JP2013530045				
US8499598	B2	2013-08-06	US8499598				
US20130319062	A1	2013-12-05	US20130319062				
KR101394775	B1	2014-05-15	KR101394775				
US8776566	B2	2014-07-15	US8776566				
CN102892915	B	2014-09-03	CN102892915B				
JP5619987	B2	2014-11-05	JP5619987				
AU2011237361	B2	2015-01-22	AU2011237361				
BR112012025734	A2	2017-08-29	BR112012025734				
EP2556178	A4	2017-11-29	EP2556178				
BR112012025734	A8	2018-06-26	BR112012025734				

Abstract

(EP2556178)

An apparatus and method of uniformly heating, Theologically softening, and thermoplastically forming metallic glasses rapidly into a net shape using a rapid capacitor discharge forming (RCDF) tool in combination with an electromagnetic force generated by the interaction of the applied current with a transverse magnetic field. The RCDF method utilizes the

discharge of electrical energy stored in a capacitor to uniformly and rapidly heat a sample or charge of metallic glass alloy to a predetermined "process temperature" between the glass transition temperature of the amorphous metal and the equilibrium melting point of the alloy in a time scale of several milliseconds or less, at which point the interaction between the electric field and the magnetic field generates a force capable of shaping the heated sample into a high quality amorphous bulk article via any number of techniques including, for example, injection **molding**, dynamic forging, stamp forging, and blow **molding** in a time scale of less than one second.

Inventors

JOHNSON WILLIAM L

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ROBERTS SCOTT N

SAMWER KONRAD

Latest standardized assignees - inventors removed

CALIFORNIA INSTITUTE OF TECHNOLOGY

Family 2/25 - FAMPAT - ©Questel

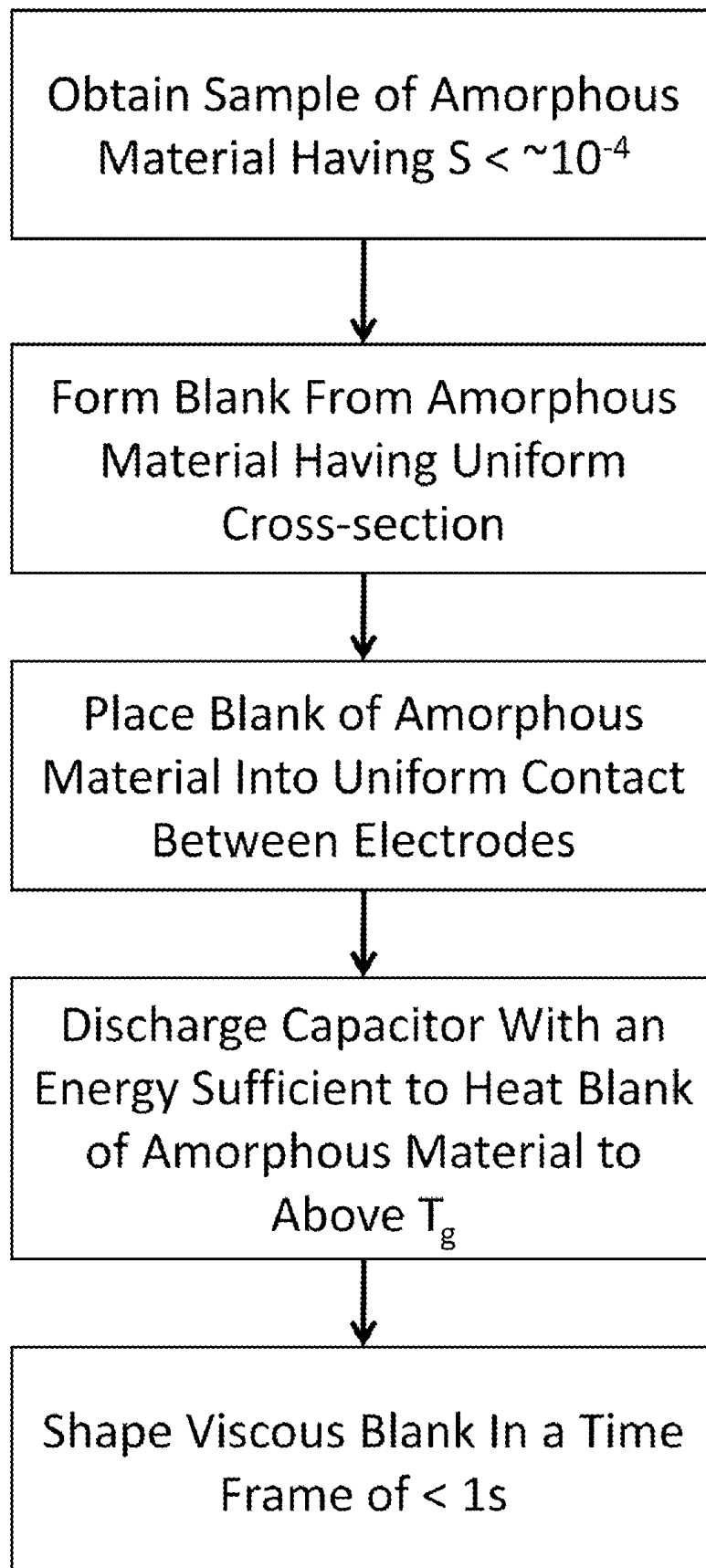
Title

(EP2627793)

Forming of metallic glass by rapid capacitor discharge forging

Images

FIG. 1



Publication data including kind & date

WO2012051443	A2	2012-04-19	WO201251443				
WO2012051443	A3	2012-07-05	WO201251443				
AU2011316049	A1	2013-05-23	AU2011316049				
KR20130079590	A	2013-07-10	KR20130079590				
CN103228811	A	2013-07-31	CN103228811				
EP2627793	A2	2013-08-21	EP2627793				
MX2013004147	A	2013-08-29	MX2013004147				
IN1269/KOLNP/2013	A	2013-09-27	IN2013KN01269				
BR112013009037	A1	2014-01-07	BR112013009037				
JP2014501619	A	2014-01-23	JP2014501619				
KR101472698	B1	2014-12-15	KR101472698				
CN103228811	B	2015-05-06	CN103228811B				
AU2011316049	B2	2015-12-10	AU2011316049				
JP2016028834	A	2016-03-03	JP2016028834				
JP5934226	B2	2016-06-15	JP5934226				
EP2627793	A4	2016-07-13	EP2627793				

Abstract

(EP2627793)

A forging apparatus and method of uniformly heating, rheologically softening, and thermoplastically forming metallic glasses rapidly into a net shape using a rapid capacitor discharge forming (RCDF) tool are provided. The RCDF method utilizes the discharge of electrical energy stored in a capacitor to uniformly and rapidly heat a sample or charge of metallic glass alloy to a predetermined "process temperature" between the glass transition temperature of the amorphous material and the equilibrium melting point of the alloy in a time scale of several milliseconds or less. Once the sample is uniformly heated such that the entire sample block has a sufficiently low process viscosity it may be shaped into high quality amorphous bulk articles via forging in a time frame of less than 1 second.

Inventors

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SCHRAMM JOSEPH P

DEMETRIOU MARIOS D

JOHNSON WILLIAM L

Latest standardized assignees - inventors removed

CALIFORNIA INSTITUTE OF TECHNOLOGY

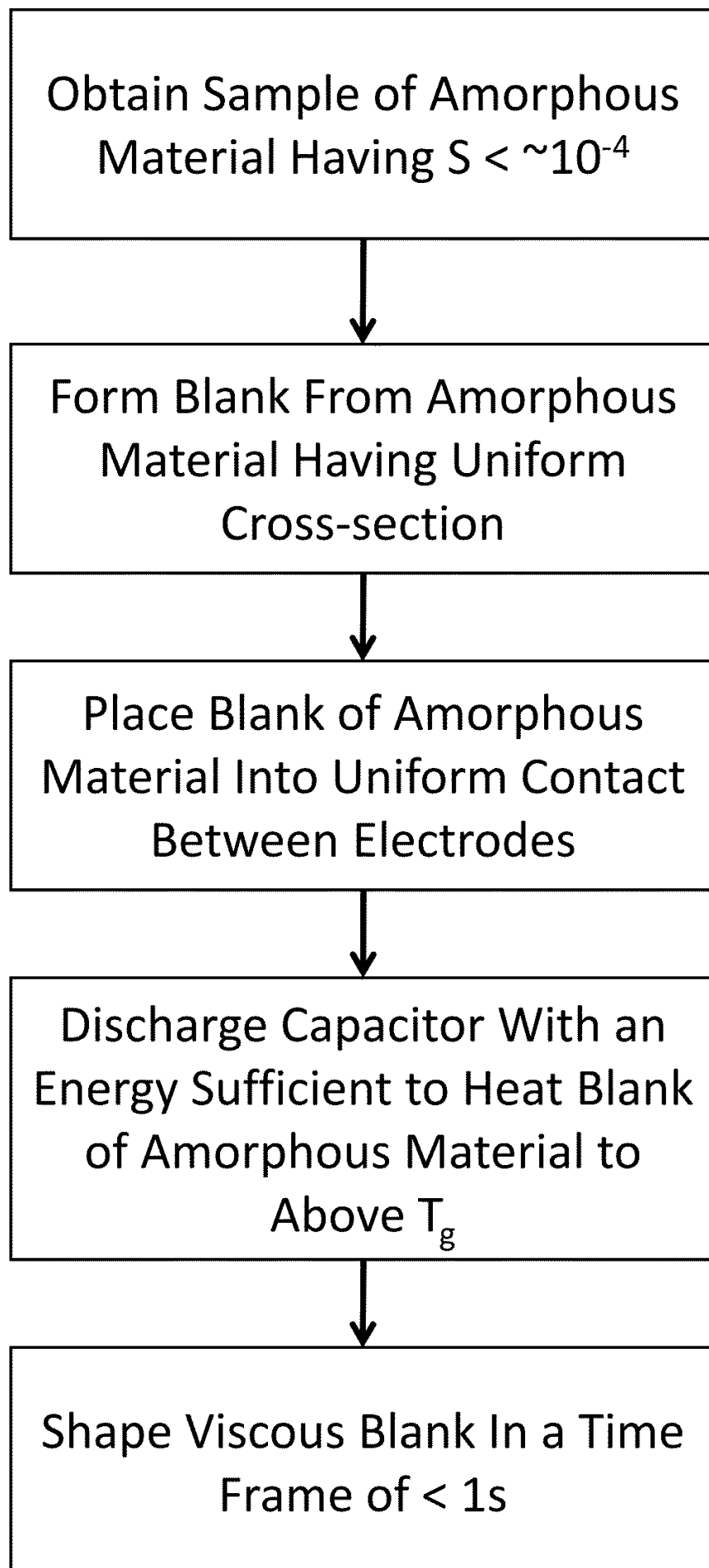
Family 3/25 - FAMPAT - ©Questel

Title

(EP2271590)

Forming of metallic glass by rapid capacitor discharge

Images



Publication data including kind & date

WO2009117735	A1	2009-09-24	WO2009117735				
US20090236017	A1	2009-09-24	US20090236017				
KR20110000736	A	2011-01-05	KR20110000736				
EP2271590	A1	2011-01-12	EP2271590				
CN101977855	A	2011-02-16	CN101977855				
JP2011517623	A	2011-06-16	JP2011517623				
IN7141/DELNP/2010	A	2012-02-17	IN2010DN07141				
EP2271590	A4	2013-01-02	EP2271590				
US20130112321	A1	2013-05-09	US20130112321				
SG191693	A1	2013-07-31	SG-191693				
KR101304049	B1	2013-09-04	KR101304049				
US8613813	B2	2013-12-24	US8613813				
US20140033787	A1	2014-02-06	US20140033787				
CN104313265	A	2015-01-28	CN104313265				
CN101977855	B	2015-07-29	CN101977855B				
JP5775447	B2	2015-09-09	JP5775447				
US9309580	B2	2016-04-12	US9309580				
US20160298205	A1	2016-10-13	US20160298205				
US9539628	B2	2017-01-10	US9539628				
US9745641	B2	2017-08-29	US9745641				
IN288500	B	2017-10-27	IN-288500				
CN104313265	B	2018-07-13	CN104313265B				

Abstract

(EP2271590)

An apparatus and method of uniformly heating, Theologically softening, and thermoplastically forming metallic glasses rapidly into a net shape using a rapid capacitor discharge forming (RCDF) tool are provided. The RCDF method utilizes the discharge of electrical energy stored in a capacitor to uniformly and rapidly heat a sample or charge of metallic glass alloy to a predetermined "process temperature" between the glass transition temperature of the amorphous material and the equilibrium melting point of the alloy in a time scale of several milliseconds or less. Once the sample is uniformly heated such that the entire sample block has a sufficiently low process viscosity it may be shaped into high quality amorphous bulk articles via any number of techniques including, for example, injection **molding**, dynamic forging, stamp forging, and blow **molding** in a time frame of less than 1 second.

Inventors

DEMETRIOU MARIOS D

JOHNSON WILLIAM L

KIM CHOONG PAUL

SCHRAMM JOSEPH P

Latest standardized assignees - inventors removed

CALIFORNIA INSTITUTE OF TECHNOLOGY

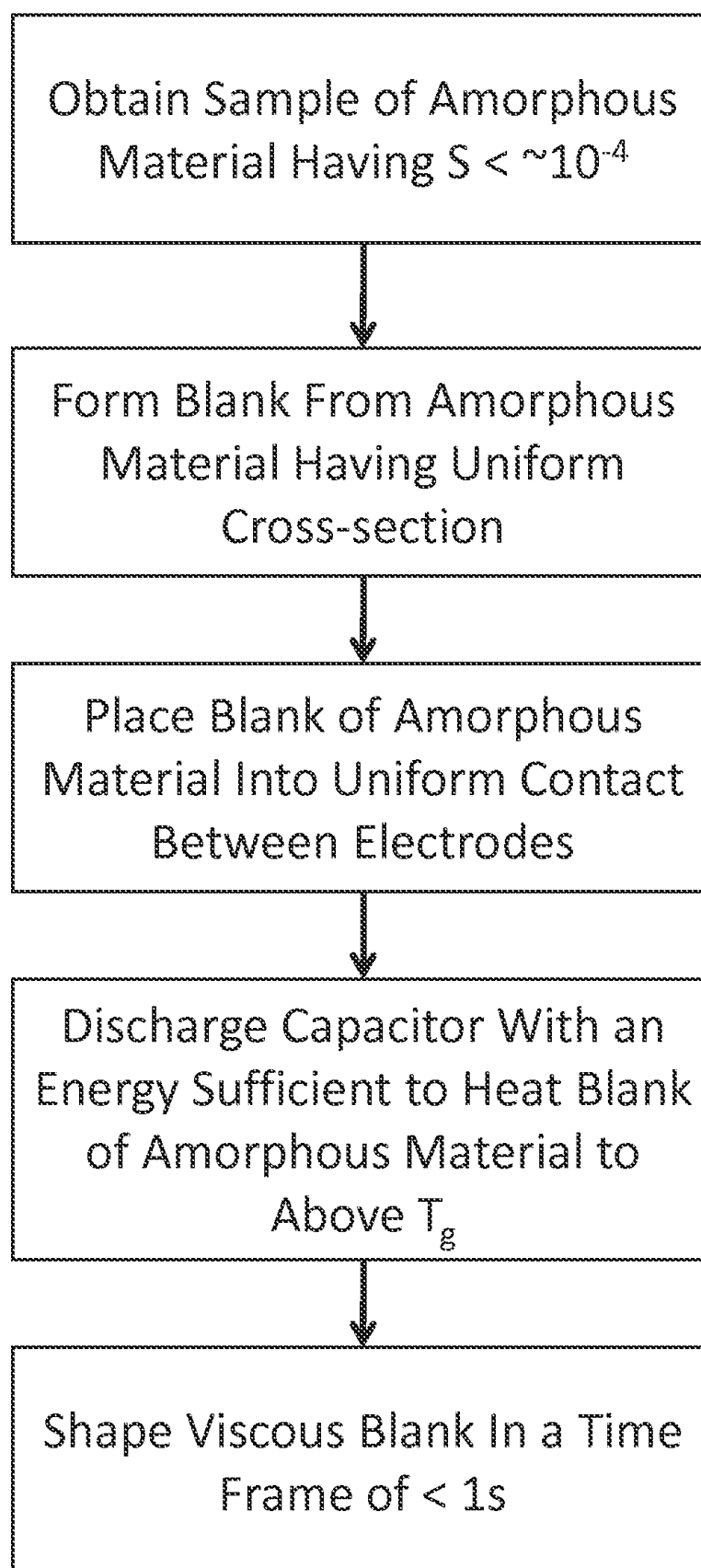
Family 4/25 - FAMPAT - ©Questel

Title

(EP2675934)

Injection **molding** of metallic glass by rapid capacitor discharge**Images**

FIG. 1



WO2012112656	A3	2012-12-27	WO2012112656				
KR20130126707	A	2013-11-20	KR20130126707				
CN103443321	A	2013-12-11	CN103443321				
EP2675934	A2	2013-12-25	EP2675934				
JP2014508862	A	2014-04-10	JP2014508862				
KR101527306	B1	2015-06-09	KR101527306				
CN103443321	B	2015-09-30	CN103443321B				
JP5939545	B2	2016-06-22	JP5939545				
EP2675934	A4	2016-07-13	EP2675934				

Abstract

(EP2675934)

An apparatus and method of uniformly heating, rheologically softening, and thermoplastically forming magnetic metallic glasses rapidly into a net shape using a rapid capacitor discharge forming (RCDF) tool are provided. The RCDF method utilizes the discharge of electrical energy stored in a capacitor to uniformly and rapidly heat a sample or charge of metallic glass alloy to a predetermined "process temperature" between the glass transition temperature of the amorphous material and the equilibrium melting point of the alloy in a time scale of several milliseconds or less. Once the sample is uniformly heated such that the entire sample block has a sufficiently low process viscosity it may be shaped into high quality amorphous bulk articles via any number of techniques including, for example, injection **molding**, dynamic forging, stamp forging, sheet forming, and blow **molding** in a time frame of less than 1 second.

Inventors

DEMETRIOU MARIOS D

SCHRAMM JOSEPH P

KALTENBOECK GEORG

JOHNSON WILLIAM L

Latest standardized assignees - inventors removed

CALIFORNIA INSTITUTE OF TECHNOLOGY

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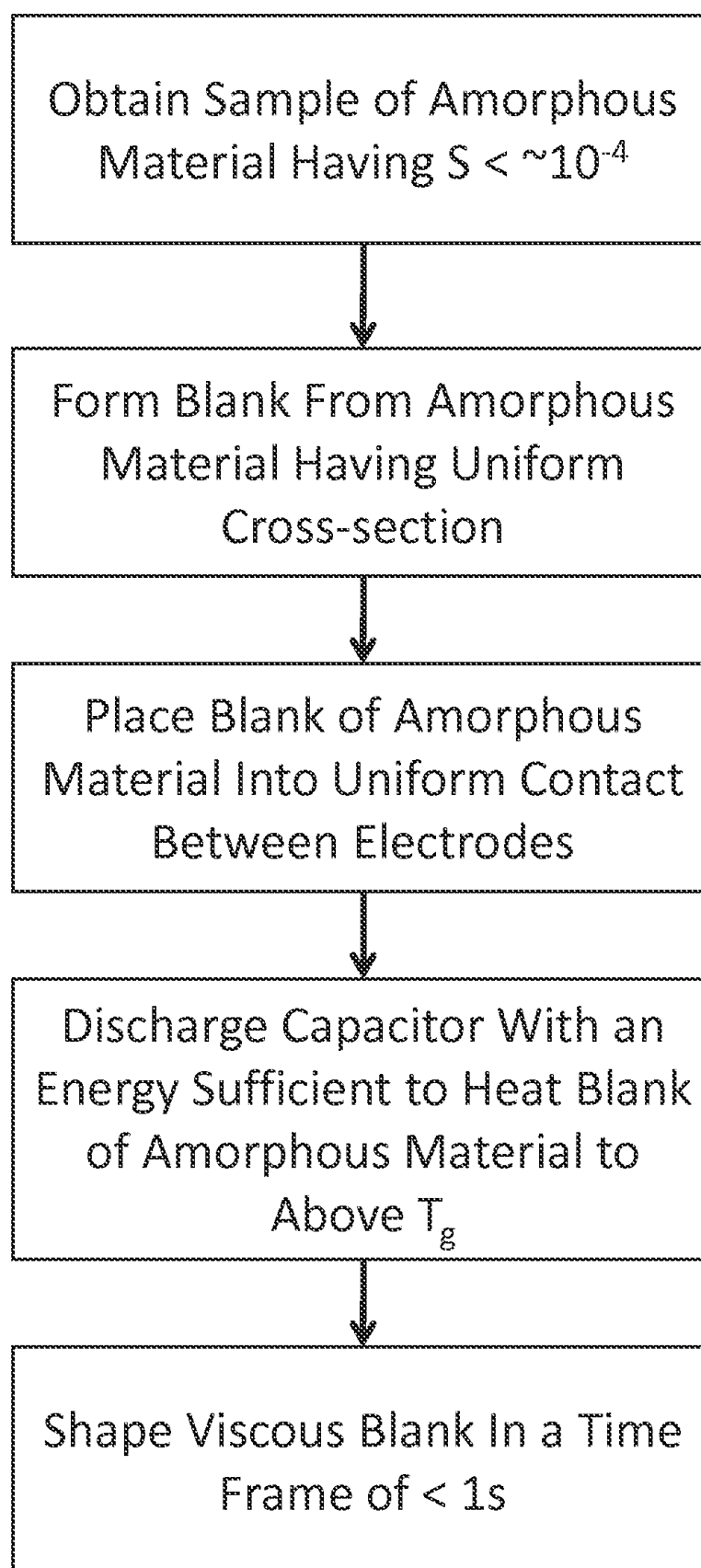
Title

(EP2655681)

Sheet forming of metallic glass by rapid capacitor discharge

Images

FIG. 1



AU2011352304	A1	2013-05-02	AU2011352304				
CN103328675	A	2013-09-25	CN103328675				
KR20130108441	A	2013-10-02	KR20130108441				
EP2655681	A1	2013-10-30	EP2655681				
JP2014502923	A	2014-02-06	JP2014502923				
EP2655681	A4	2015-03-04	EP2655681				
KR101524583	B1	2015-06-03	KR101524583				
JP5739549	B2	2015-06-24	JP5739549				
AU2011352304	B2	2015-11-05	AU2011352304				
CN103328675	B	2016-01-06	CN103328675B				

Abstract

(EP2655681)

An apparatus and method of uniformly heating, rheologically softening, and thermoplastically forming metallic glasses rapidly into a net shape using a rapid capacitor discharge forming (RCDF) tool are provided. The RCDF method utilizes the discharge of electrical energy stored in a capacitor to uniformly and rapidly heat a sample or charge of metallic glass alloy to a predetermined "process temperature" between the glass transition temperature of the amorphous material and the equilibrium melting point of the alloy in a time scale of several milliseconds or less. Once the sample is uniformly heated such that the entire sample block has a sufficiently low process viscosity it may be shaped into high quality amorphous bulk articles via any number of techniques including, for example, injection **molding**, dynamic forging, stamp forging, sheet forming, and blow **molding** in a time frame of less than 1 second.

Inventors

JOHNSON WILLIAM L

DEMETRIOU MARIOS D

SCHRAMM JOSEPH P

Latest standardized assignees - inventors removed

CALIFORNIA INSTITUTE OF TECHNOLOGY

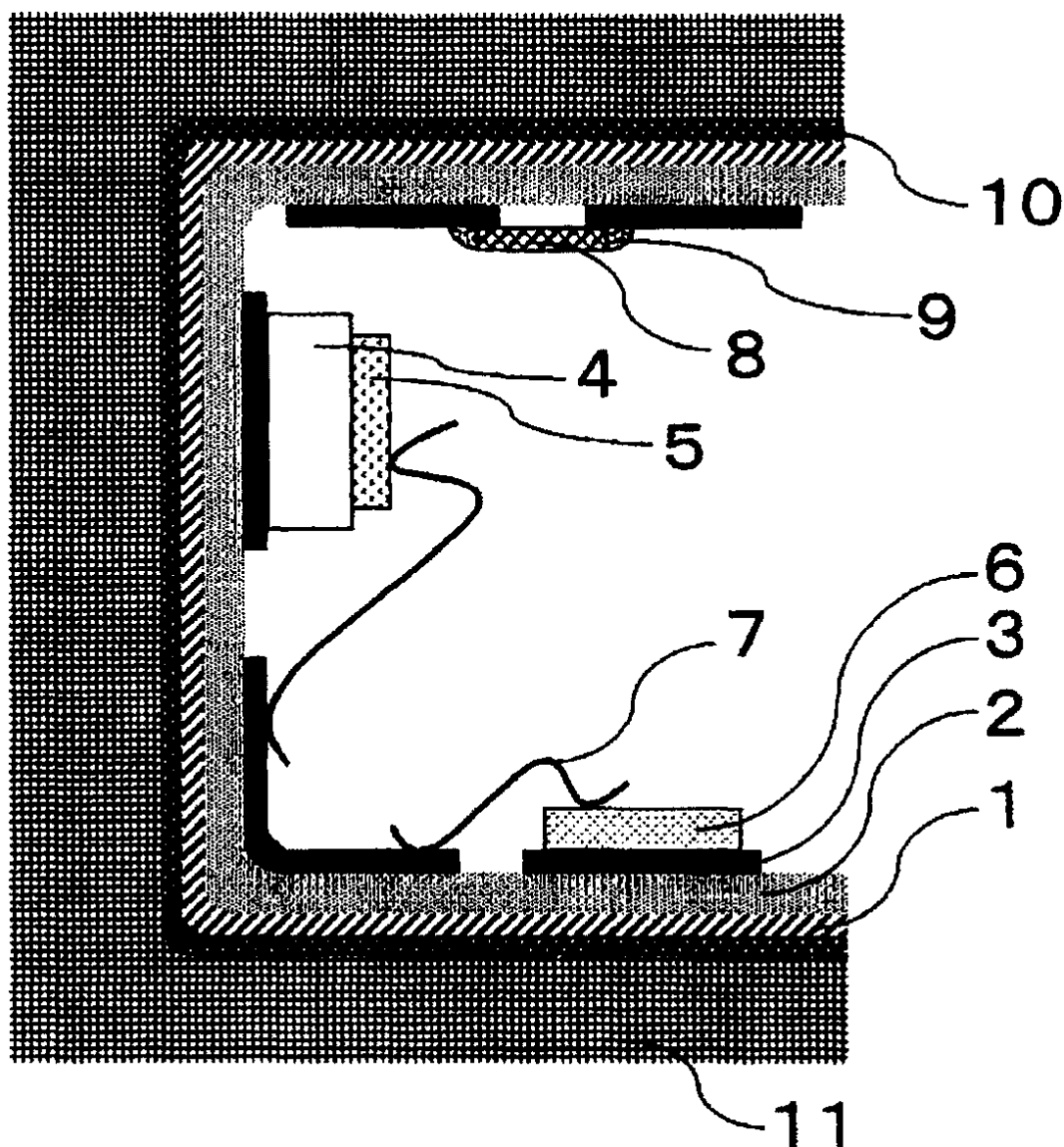
Family 6/25 - FAMPAT - ©Questel

Title

(EP1874101)

Metal base circuit board, led, and led light source unit

Images



Publication data including kind & date

WO2006112478	A1	2006-10-26	WO2006112478
CA2605209	A1	2006-10-26	CA2605209
JP2006303082	A	2006-11-02	JP2006303082
JP2007194155	A	2007-08-02	JP2007194155
JP2007214202	A	2007-08-23	JP2007214202
JP2007266204	A	2007-10-11	JP2007266204
TW200742540	A	2007-11-01	TW200742540
MX2007012974	A	2007-12-13	MX2007012974
KR20070122450	A	2007-12-31	KR20070122450
EP1874101	A1	2008-01-02	EP1874101
CN101161039	A	2008-04-09	CN101161039
US20090032295	A1	2009-02-05	US20090032295
EP1874101	A4	2009-11-04	EP1874101
JP4459910	B2	2010-04-28	JP4459910
JP4484830	B2	2010-06-16	JP4484830
CN101161039	B	2010-12-29	CN101161039B
JP4672425	B2	2011-04-20	JP4672425



HK1116981	A1	2011-09-09	HK1116981				
KR101073423	B1	2011-10-17	KR101073423				
US8071882	B2	2011-12-06	US8071882				
JP4913459	B2	2012-04-11	JP4913459				
TWI395538	B	2013-05-01	TWI395538				
CA2605209	C	2013-10-22	CA2605209				

Abstract

(EP1874101)

To provide a thin metal base circuit board which can be not only installed on a flat portion but also closely attached to a side or bottom surface of a case or to a stepped or curved portion and which is excellent in heat dissipation performance, electrical insulating performance and flexibility; a process for its production; and a hybrid integrated circuit, an LED module and a bright, ultra-long-life LED light source employing it. A metal base circuit board having insulating layers and conductive circuits or metal foils alternately laminated, characterized in that the thickness of each conductive circuit or metal foil is from 5 μm to 450 μm , each insulating layer is made of a cured product of a resin composition comprising an inorganic filler and a thermosetting resin, and the thickness of each insulating layer is from 9 μm to 300 μm ; and a hybrid circuit board employing it. The metal base circuit board wherein a coverlay is provided, and a layer having a magnetic loss or a layer having a dielectric loss is laminated on the surface of the coverlay. A LED light source unit having at least one light-emitting diode (LED) mounted on the conductive circuit.

Inventors

OKAJIMA YOSHIHIKO

YASHIMA KATSUNORI

TAKANO KEIJI

OKADA TAKUYA

Latest standardized assignees - inventors removed

DENKA

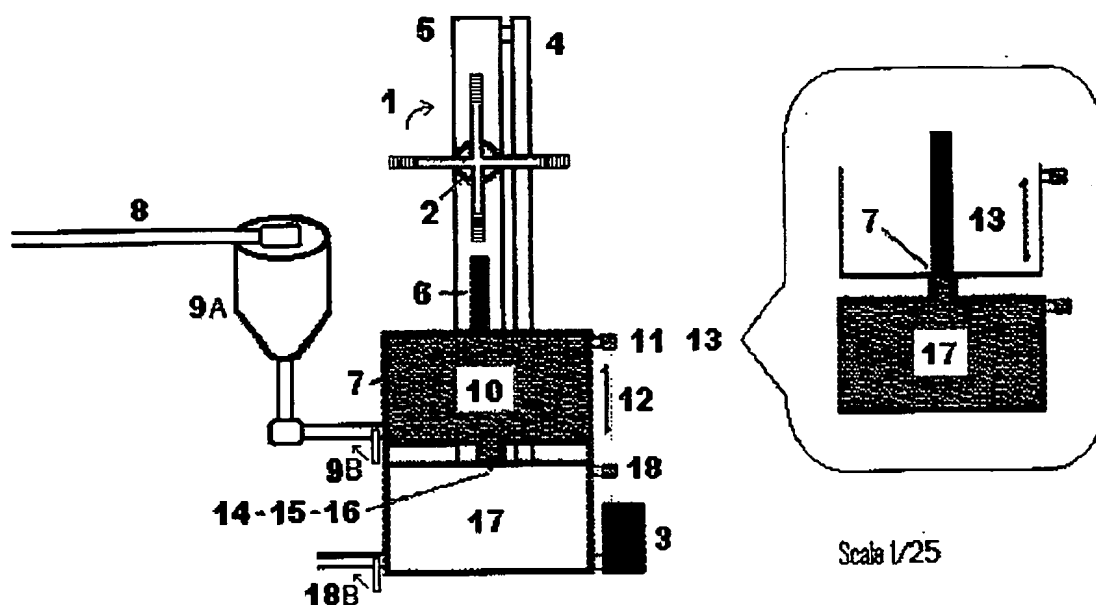
Family 7/25 - FAMPAT - ©Questel

Title

(US20140178513)

Non ionic/electrolyte, liquid/gaseous, mechanically refined/nanoparticle dispersion Building Materials/High Wear-Heat Resistant Part Brushes, Windings, Battery Cells, Brake Pads, Die Cast **Molding**, Refrigeration, Polarized/Integrated Optical, Spectrometric Processors, Central Processor Unit Processors, Electronic Storage Media, Analogous Series/Parallel Circuit Generators/Transceivers, Particulate Matter PM Carbonaceous-Polyamide, Crystalline Silica, and Cellulosic Filament Extraction/Miners Suit

Images

**Publication data including kind & date**

US20140178513

A1 2014-06-26

US20140178513

**Abstract**

(US20140178513)

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.

Inventors

MATTHEWS ROBERT RICHARD

Family 8/25 - FAMPAT - ©Questel

Title

(EP-837478)

Current lead for a superconducting magnet system free from liquid helium

Images

JP2569466	Y2	1998-04-22	JP2569466Y
JP2756552	B2	1998-05-25	JP2756552
JP2756551	B2	1998-05-25	JP2756551
EP0596249	B1	1999-04-14	EP-596249
DE69324436	D1	1999-05-20	DE69324436
DE69324436	T2	1999-08-26	DE69324436
JP3032653	B2	2000-04-17	JP3032653
JP3163462	B2	2001-05-08	JP3163462
JP3172893	B2	2001-06-04	JP3172893
EP0837478	B1	2003-07-30	EP-837478
DE69333128	D1	2003-09-04	DE69333128
DE69333128	T2	2004-04-22	DE69333128



Abstract

(EP-837478)

A current lead in a superconducting magnet system for supplying an electric current to the superconducting coil member is provided. The current lead is made of a high-temperature superconducting material and is cooled by a cryocooler into the superconducting state with the current lead kept in contact with the cryocooler. <IMAGE>

Inventors

SAKURABA JUNJI

HATA FUMIAKI

KUNG CHONG CHIN

YAMADA YUTAKA

JIKIHARA KAZUNORI

HASEBE TSUGINORI

WATANABE KAZUO

Latest standardized assignees - inventors removed

SUMITOMO HEAVY INDUSTRIES

Family 9/25 - FAMPAT - ©Questel

Title

(EP2063466)

Interconnection element and method of fabrication thereof

Images

AU5939796	A	1996-12-11	AU9659397				
AU6635296	A	1996-12-18	AU9666352				
US5601740	A	1997-02-11	US5601740				
WO9638858	A3	1997-03-20	WO9638858				
WO9716866	A2	1997-05-09	WO9716866				
AU5965796	A	1997-05-22	AU9659657				
JPH09505439	A	1997-05-27	JP09505439				
WO9716866	A3	1997-06-19	WO9716866				
JPH09508241	A	1997-08-19	JP09508241				
EP0792463	A1	1997-09-03	EP-792463				
EP0792517	A1	1997-09-03	EP-792517				
EP0792519	A1	1997-09-03	EP-792519				
EP0792462	A1	1997-09-03	EP-792462				
KR19977005028	A	1997-09-06	KR19977005028				
KR19977005029	A	1997-09-06	KR19977005029				
KR19970705177	A	1997-09-06	KR19970705177				
KR19977005177	A	1997-09-06	KR19977005177				
KR19977004546	A	1997-09-06	KR19977004546				
EP0795200	A1	1997-09-17	EP-795200				
EP0795200	A4	1997-11-12	EP-795200				
WO9743656	A2	1997-11-20	WO9743656				
WO9743654	A1	1997-11-20	WO9743654				
WO9743653	A1	1997-11-20	WO9743653				
WO9744676	A1	1997-11-27	WO9744676				
KR19977007576	A	1997-12-01	KR19977007576				
KR19977007575	A	1997-12-01	KR19977007575				
JPH09512139	A	1997-12-02	JP09512139				
AU3136697	A	1997-12-05	AU9731366				
AU3073997	A	1997-12-05	AU9730739				
AU3073797	A	1997-12-05	AU9730737				
AU3127797	A	1997-12-09	AU9731277				
EP0792462	A4	1997-12-29	EP-792462				
WO9801906	A1	1998-01-15	WO9801906				
CN1171167	A	1998-01-21	CN1171167				
AU3603497	A	1998-02-02	AU9736034				
WO9743656	A3	1998-03-12	WO9743656				
EP0828582	A1	1998-03-18	EP-828582				
EP0837750	A1	1998-04-29	EP-837750				
EP0839323	A1	1998-05-06	EP-839323				
EP0839322	A1	1998-05-06	EP-839322				
EP0839321	A1	1998-05-06	EP-839321				
EP0837750	A4	1998-06-10	EP-837750				
JPH10506238	A	1998-06-16	JP10506238				
JPH10506197	A	1998-06-16	JP10506197				
EP0792463	A4	1998-06-24	EP-792463				
EP0792517	A4	1998-06-24	EP-792517				
EP0792519	A4	1998-06-24	EP-792519				
EP0729652	A4	1998-06-24	EP-729652				

CN1191500	A	1998-08-26	CN1191500				
EP0859686	A1	1998-08-26	EP-859686				
KR19980053474	A	1998-09-25	KR19980053474				
JPH10510107	A	1998-09-29	JP10510107				
CN1194692	A	1998-09-30	CN1194692				
CN1194693	A	1998-09-30	CN1194693				
TW341747	B	1998-10-01	TW-341747				
CN1197514	A	1998-10-28	CN1197514				
EP0859686	A4	1998-11-11	EP-859686				
WO9852224	A1	1998-11-19	WO9852224				
AU7491598	A	1998-12-08	AU9874915				
US5852871	A	1998-12-29	US5852871				
EP0886894	A2	1998-12-30	EP-886894				
EP0828582	A4	1999-02-03	EP-828582				
CN1208368	A	1999-02-17	CN1208368				
EP0898712	A2	1999-03-03	EP-898712				
KR19990021980	A	1999-03-25	KR19990021980				
KR19990021993	A	1999-03-25	KR19990021993				
KR19990021981	A	1999-03-25	KR19990021981				
KR19990021982	A	1999-03-25	KR19990021982				
KR19990029047	A	1999-04-15	KR19990029047				
KR19990029046	A	1999-04-15	KR19990029046				
KR19990029048	A	1999-04-15	KR19990029048				
JPH11504725	A	1999-04-27	JP11504725				
US5900738	A	1999-05-04	US5900738				
JPH11126800	A	1999-05-11	JP11126800				
JP2892505	B2	1999-05-17	JP2892505				
US5912046	A	1999-06-15	US5912046				
EP0886894	A4	1999-06-16	EP-886894				
US5917707	A	1999-06-29	US5917707				
KR100210691	B1	1999-07-15	KR100210691				
KR100210691	B1	1999-07-15	KR100210691				
JPH11508407	A	1999-07-21	JP11508407				
US5926951	A	1999-07-27	US5926951				
CN1225724	A	1999-08-11	CN1225724				
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EP0985231	A1	2000-03-15	EP-985231				
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EP2058667	A2	2009-05-13	EP2058667				
EP2063466	A2	2009-05-27	EP2063466				
EP1262782	A3	2009-06-17	EP1262782				
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EP1468776	A3	2009-11-04	EP1468776				
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JP4598356	B2	2010-12-15	JP4598356
JP2011069829	A	2011-04-07	JP2011069829
JP4741626	B2	2011-08-03	JP4741626



Abstract

(EP2063466)

An electrical interconnection element (720, 730) comprises: a conductive interconnection component (730), including a connection region; and a conductive cantilever structure (720) formed by depositing spring material (712) in an opening of a masking layer (710) on a sacrificial substrate (702), wherein the conductive cantilever structure (720) is mounted to the connection region of the interconnection component (730).

Inventors

KHANDROS IGOR Y
ELDRIDGE BENJAMIN N
MATHIEU GAETAN L

Latest standardized assignees - inventors removed

CASCADE MICROTECH
FORMFACTOR
MICRO PROBE CARLSBAD
ASTRIA SEMICONDUCTOR HOLDINGS

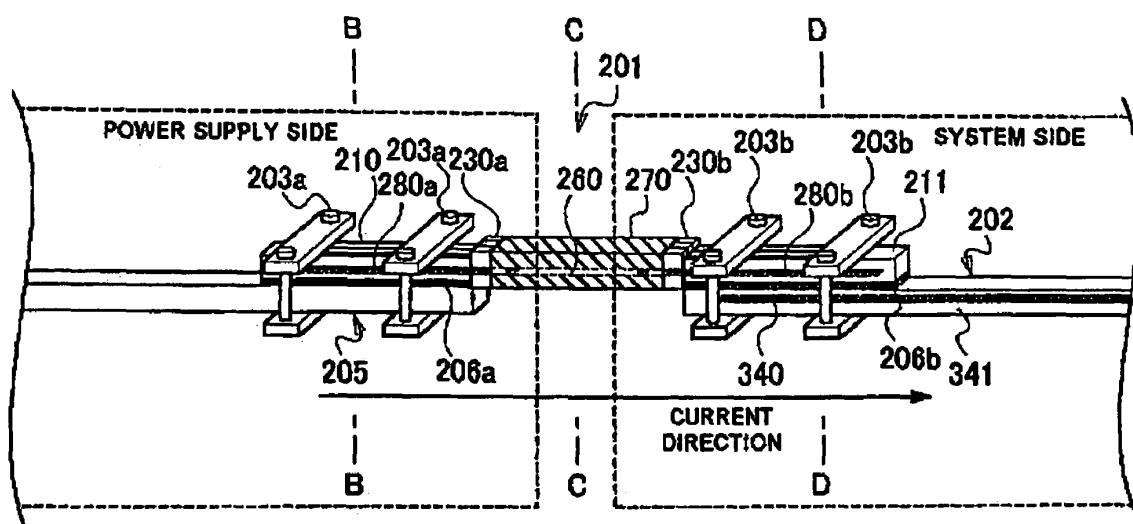
Family 10/25 - FAMPAT - ©Questel

Title

(EP1860736)

Oxide superconductor current lead and method of manufacturing the same, and superconducting system

Images



Publication data including kind & date

EP1445834	A2	2004-08-11	EP1445834
JP2004304164	A	2004-10-28	JP2004304164
JP2004304163	A	2004-10-28	JP2004304163
US20040222011	A1	2004-11-11	US20040222011
EP1445834	A3	2006-04-05	EP1445834



EP1860736	A2	2007-11-28	EP1860736				
EP1860736	A3	2008-04-23	EP1860736				
EP1445834	B1	2008-05-28	EP1445834				
US7394024	B2	2008-07-01	US7394024				
DE602004014046	D1	2008-07-10	DE602004014046				
JP4857436	B2	2012-01-18	JP4857436				
JP4857435	B2	2012-01-18	JP4857435				

Abstract

(EP1860736)

An oxide superconductor current lead in which generation of Joule heat at joint portions with a system side conductor and a power supply side conductor is reduced with use of an oxide superconductor with less heat penetration into a superconducting equipment system is provided. A columnar oxide superconductor molten bodies (interelectrode superconductor 260, in-electrode superconductors 280a and 280b) are produced, the in-electrode superconductor 280a and a left end portion of the interelectrode superconductor 260 are placed into a power supply side metallic electrode 210, and the in-electrode superconductor 280b and a right end portion of the interelectrode superconductor 260 are similarly placed in a system side metallic electrode 211, then degassed joining metal is used to join them to form an oxide superconductor current lead 201, a power supply side conductor 5 from a power supply is joined to the power supply side metallic electrode 210, and a system side conductor 202 from a superconducting system side is joined to the system side metallic electrode 211 with use of respective clamps 203a and 203b.

Inventors

KOHAYASHI SHUICHI

UEMURA KAZUYUKI

NAGAYA SHIGEO

KASHIMA NAOJI

Latest standardized assignees - inventors removed

CHUBU ELECTRIC POWER

DOW MINING

DOWA ELECTRONICS MATERIALS

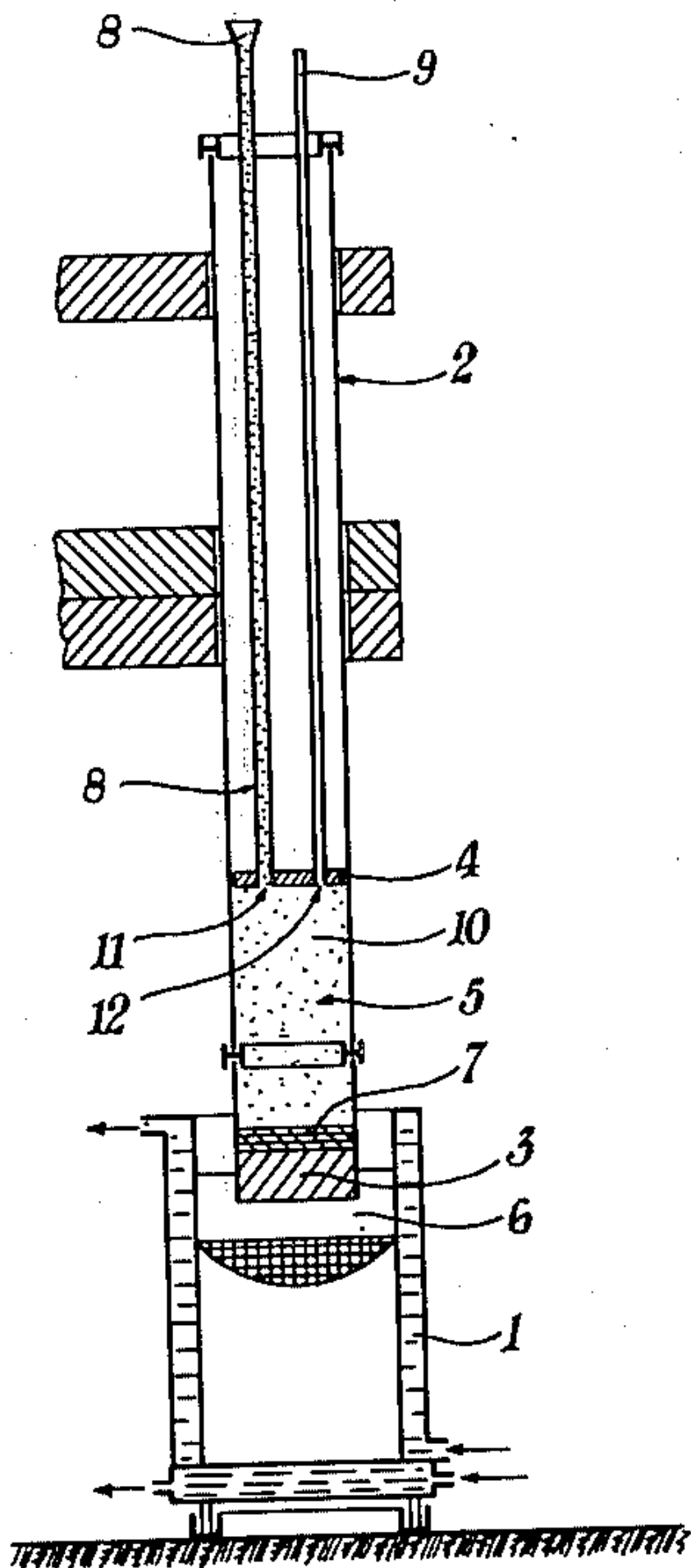
Family 11/25 - FAMPAT - ©Questel

Title

(US3905803)

Process for producing ingots by electric resistance melting particulate metal under slag

Images



Publication data including kind & date

IT973940	B	1974-06-10	IT-973940
DE2360883	A1	1974-06-12	DE2360883
FR2211538	A1	1974-07-19	FR2211538
JPS4996925	A	1974-09-13	JP49096925
US3905803	A	1975-09-16	US3905803
DE2360883	B2	1975-10-09	DE2360883
GB1454911	A	1976-11-10	GB1454911
JPS52821	B2	1977-01-11	JP77000821
JP874482	C	1977-07-29	JP-874482
SE414318	B	1980-07-21	SE-414318



Abstract

(US3905803)

A process for producing metal alloys in the form of large-size ingots, by melting under electro-conductive slag, wherein the material forming the alloy is partly supplied as solid metal and partly as metal in powder, granules or pellets, for conciseness called "particulate metal" comprising the sequential operations of:

A. INTRODUCING INTO A **MOLD**, THE BOTTOM OF WHICH IS MADE OF ELECTRO-CONDUCTIVE MATERIAL, A CONSUMABLE-ELECTRODE UNIT, UNTIL CONTACTS THE SLAG;

B. PARTIALLY FILLING WITH SAID PARTICULATE METAL A ZONE OR RECESS PROVIDED INSIDE SAID ELECTRODE UNIT AT ITS END CONTACTING THE SLAG, CLOSED AT ITS BOTTOM END BY A BOTTOM WALL, AND AT ITS TOP BY A FEEDING PLATE FOR THE POWDER METAL;

C. ESTABLISHING IN SAID ZONE A CONTROLLED ATMOSPHERE BY A GAS CIRCULATION:

D. INCREASING THE TEMPERATURE UNTIL OBTAINING THE GRADUAL MELTING OF SAID BOTTOM WALL AND THE GRADUAL SIMULTANEOUS SINTERING OF THE PARTICULATE METAL IN SAID ZONE UNTIL FORMING A SINTERED LAYER HAVING A THICKNESS SUFFICIENT TO SUPPORT THE WEIGHT OF THE SUPERPOSED PARTICULATE METAL:

E. MELTING THE SO OBTAINED COMPOSITE ELECTRODE COMPRISING BOTH THE ELECTRODIC UNIT AND THE PARTICULATE METAL CONTINUOUSLY FED TO THE MELTING ZONE.

Inventors

BIANCHI PAOLO

RAMACCIOTTI ALDO

REPETTO EUGENIO

Latest standardized assignees - inventors removed

CENTRO SPERIMENTALE METALLURGICO

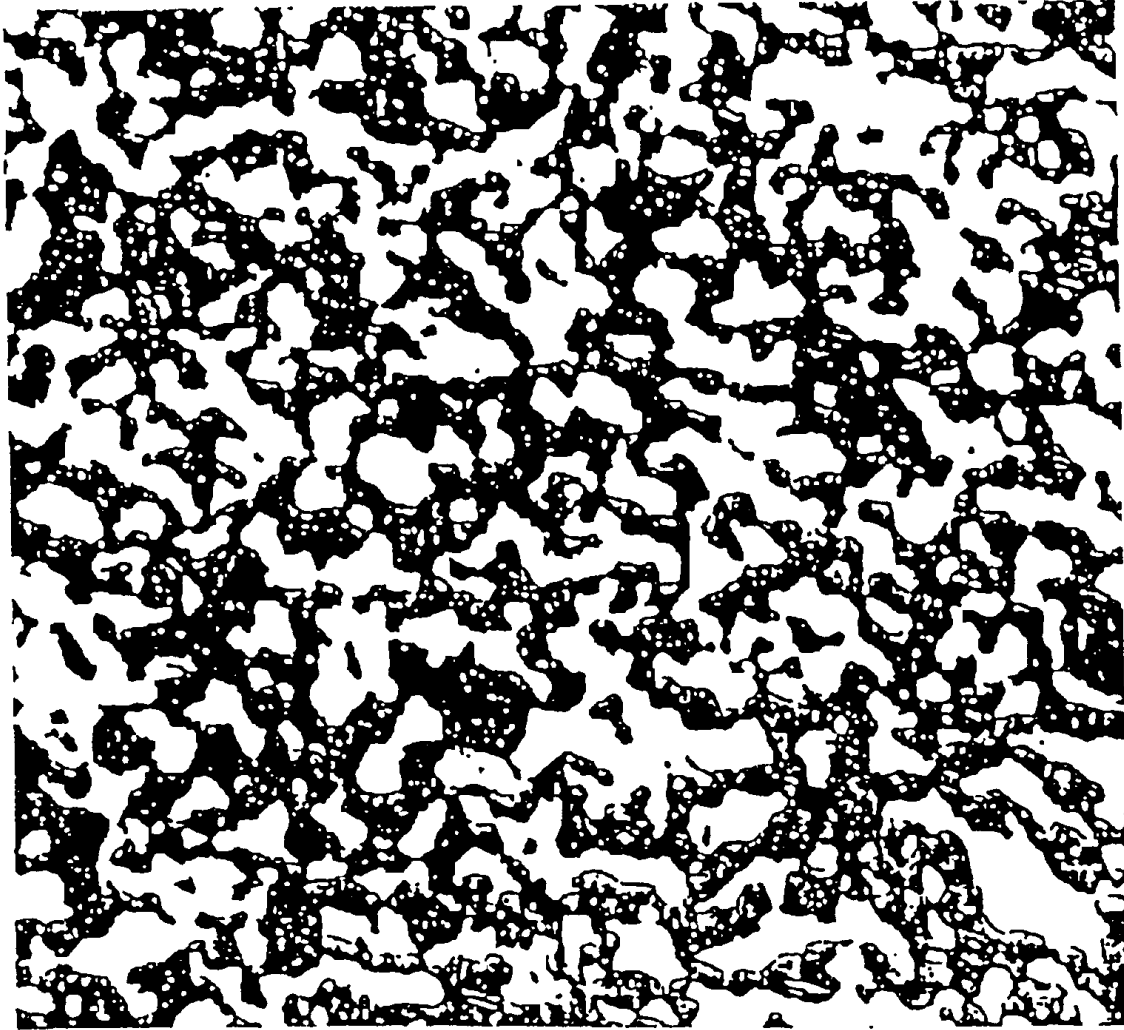
Family 12/25 - FAMPAT - ©Questel

Title

(EP1167559)

Composite material and use thereof

Images



Publication data including kind & date

WO200034539	A1	2000-06-15	WO200034539				
CN1275170	A	2000-11-29	CN1275170				
KR20010052078	A	2001-06-25	KR20010052078				
EP1167559	A1	2002-01-02	EP1167559				
KR20020035631	A	2002-05-11	KR20020035631				
KR20020035630	A	2002-05-11	KR20020035630				
KR100352993	B1	2002-09-18	KR100352993				
CN1093565	C	2002-10-30	CN1093565C				
EP1167559	A4	2003-02-05	EP1167559				
RU2216602	C2	2003-11-20	RU2216602				
US6909185	B1	2005-06-21	US6909185				
JP3690278	B2	2005-08-31	JP3690278				
EP1167559	B1	2006-03-08	EP1167559				
DE69833788	D1	2006-05-04	DE69833788				

Abstract

(EP1167559)

It is an object of the present invention to provide a composite material having low thermal expansivity, high thermal conductivity, and good plastic workability, which is applied to semiconductor devices and many other uses. The composite material is composed of metal and inorganic particles having a smaller coefficient of thermal expansion than said metal. It is characterized in that said inorganic particles disperse in such a way that 95% or more of them (in terms of their area in cross-section) form aggregates of complex configuration joining together. The composite material contains 20-80 vol% of

copper oxide, with the remainder being copper. It has a coefficient of thermal expansion of 5×10^{-6} to 14×10^{-6} / DEG C and thermal conductivity of 30-325 W/m.K in the range of room temperature to 300 DEG C. It is suitable for the radiator plate of semiconductor devices and the dielectric plate of electrostatic attractors. <IMAGE>

Inventors

KONDO YASUO
KANEDA JUNYA
AONO YASUHISA
ABE TERUYOSHI
INGAKI MASAHAISA
SAITO RYUICHI
KOIKE YOSHIHIKO
ARAKAWA HIDEO

Latest standardized assignees - inventors removed

HITACHI

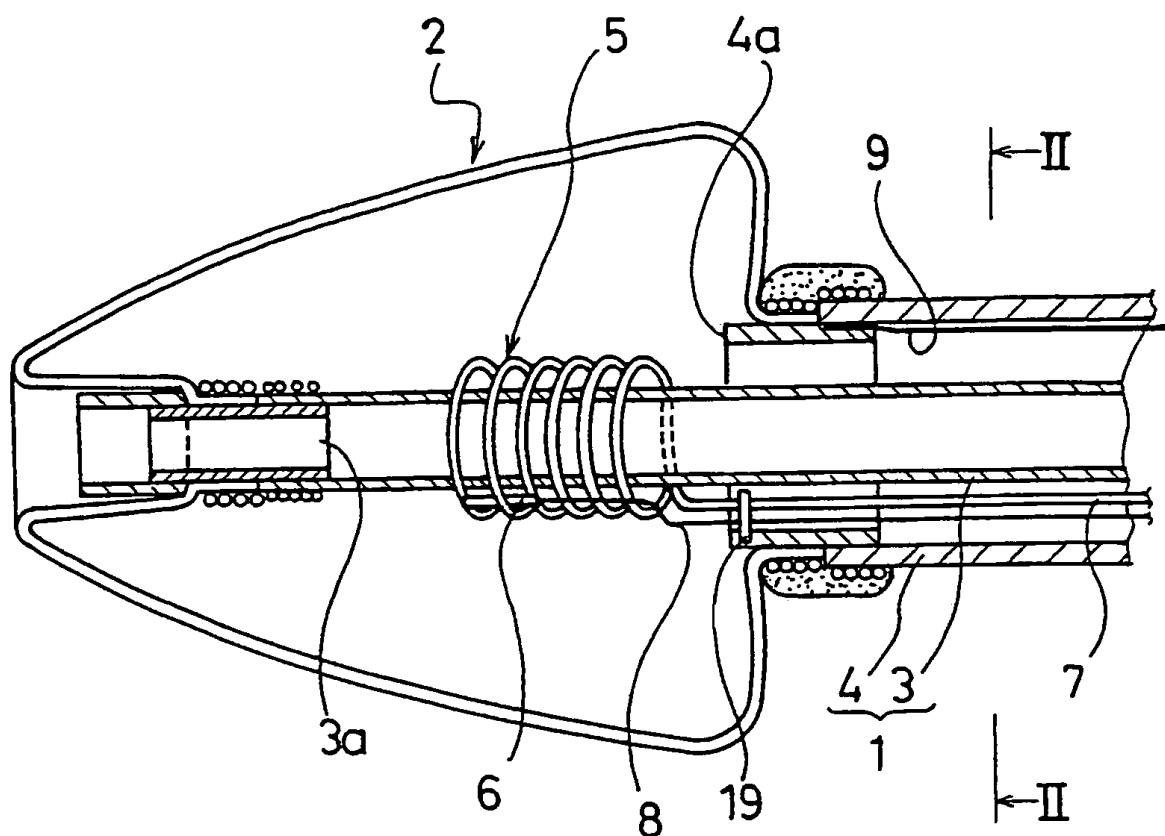
Family 13/25 - FAMPAT - ©Questel

Title

(EP1547537)

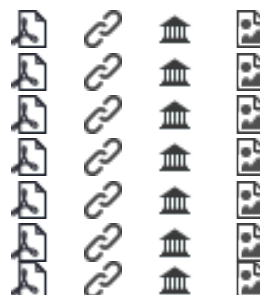
Catheter for treating irregular heart pulse

Images



Publication data including kind & date

WO2004017850	A1	2004-03-04	WO200417850
CA2494123	A1	2004-03-04	CA2494123
AU2003257613	A1	2004-03-11	AU2003257613
JP2004073570	A	2004-03-11	JP2004073570
TW200404587	A	2004-04-01	TW200404587
KR20050048613	A	2005-05-24	KR20050048613



EP1547537	A1	2005-06-29	EP1547537				
TWI235073	B	2005-07-01	TWI235073				
US20050203597	A1	2005-09-15	US20050203597				
CN1674836	A	2005-09-28	CN1674836				
IN3170/CHENP/2004	A	2006-03-03	IN2004CN03170				
EP1547537	A4	2009-04-29	EP1547537				
CN100594847	C	2010-03-24	CN100594847C				
US7744594	B2	2010-06-29	US7744594				
KR101032220	B1	2011-05-02	KR101032220				
CA2494123	C	2012-12-04	CA2494123				
IN256574	B	2013-07-05	IN-256574				
EP1547537	B1	2015-05-06	EP1547537				
ES2539106	T3	2015-06-26	ES2539106				
DK1547537	T3	2015-07-06	DK1547537T				

Abstract

(EP1547537)

A catheter for treating arrhythmia comprises a catheter shaft of a double-cylinder structure where an inner shaft is slidably inserted in an outer shaft, a balloon installed so as to straddle between the tip portion of the inner shaft and the tip portion of the outer shaft, a pair of high frequency current-carrying electrodes of which at least one electrode is provided inside the balloon, and a temperature sensor for monitoring the temperature in the balloon. The front edge portion of the balloon at least in a deflated state protrude from the tip portion of the inner shaft. Alternatively, a tube that is more flexible than the inner shaft is provided on the tip portion of the inner shaft. <IMAGE>

Inventors

YAMAZAKI YOSHIHARU

TANAKA NOBUHIKO

TAKAOKA MOTOKI

Latest standardized assignees - inventors removed

TORAY INDUSTRIES

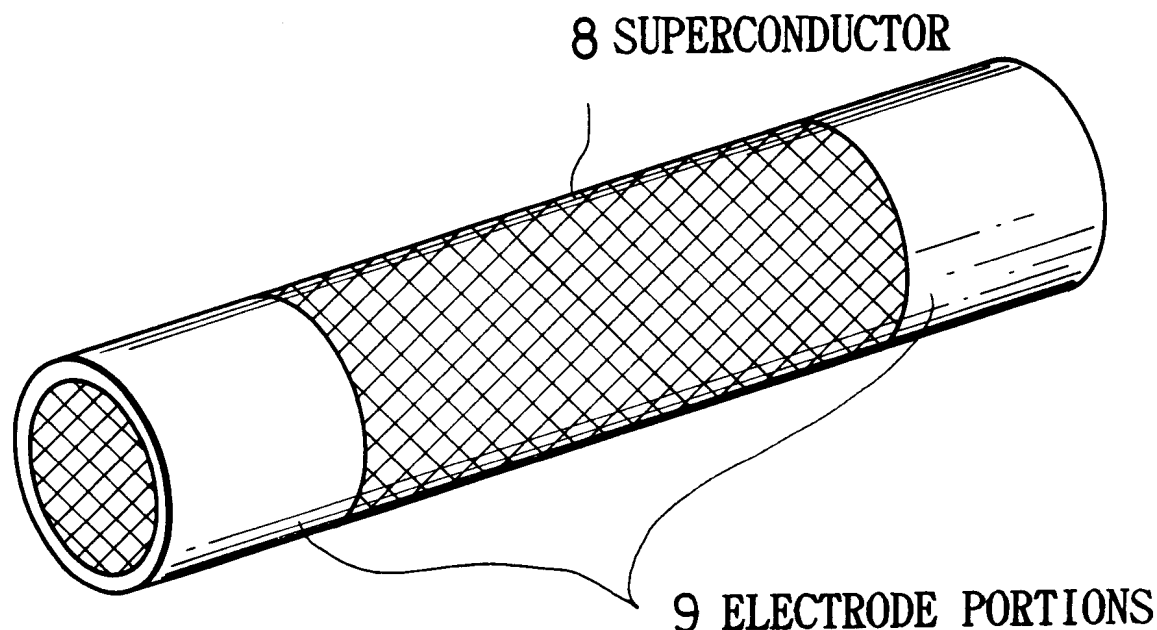
Family 14/25 - FAMPAT - ©Questel

Title

(US6216333)

Oxide superconductor current lead and method of manufacturing the same

Images

**Publication data including kind & date**

JPH1027708	A	1998-01-27	JP10027708
US6216333	B1	2001-04-17	US6216333
JP3548368	B2	2004-07-28	JP3548368

**Abstract**

(US6216333)

An oxide superconductor current lead provided with a rod-like or pipe-like oxide superconductor, at each of end parts of which a metallic electrode is formed. In this oxide superconductor current lead, the oxide superconductor is a $\text{Bi}_2\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_x$ superconductor. Further, the metallic-electrode-portion contact resistivity thereof is not more than $0.05 \mu\Omega\cdot\text{cm}^2$. Moreover, the critical current density is not less than $2,000 \text{ A/cm}^2$. Furthermore, there is provided a method of manufacturing such an oxide superconductor current lead. To perform this method, optimum conditions for conducting a heat treatment when forming electrodes at both ends of an oxide superconductor current lead are detected. Thereby, the contact resistivity during a superconducting coil becomes extremely small. Further, the critical current density is considerably enhanced. In the case of this method, an oxide superconductor (8) obtained by finishing a final sintering process is first worked into or shaped like a rod or a pipe. Then, metallic electrode portions (9) are formed by winding metallic foil around end parts of the superconductor, or by applying metallic paste thereto, or by performing a physical vapor phase epitaxy process such as a sputtering process or an evaporation process. Subsequently, a heat treatment is performed on the metallic electrode portions at a temperature, which is in a 810 to 830°C . range, for a time period of 2 to 20 hours. Thus, an oxide superconductor current lead is obtained.

Inventors

KOJIMA MASAHIRO
 HASEYAMA SHUETSU
 YOSHIZAWA SHUJI
 SATO MAMORU

Latest standardized assignees - inventors removed

DOWA ELECTRONICS MATERIALS

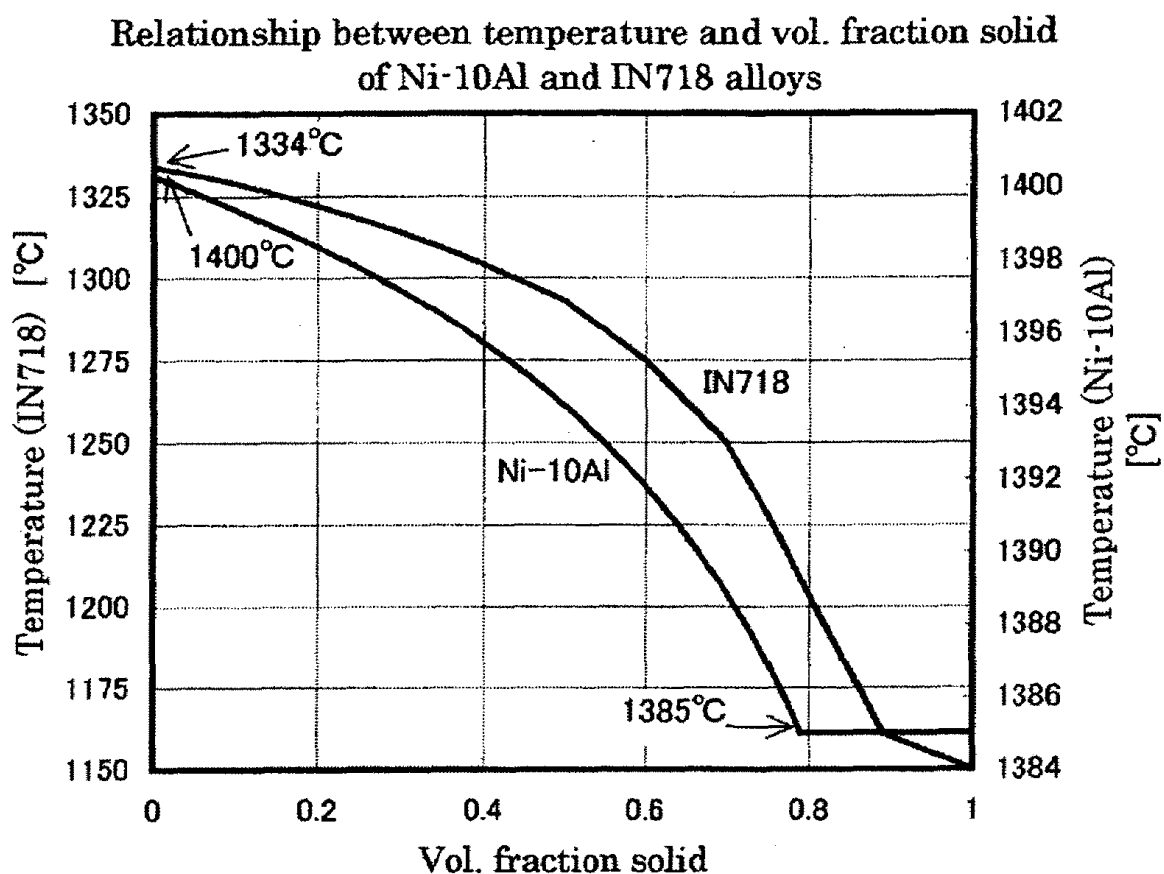
Family 15/25 - FAMPAT - ©Questel

Title

(EP2011588)

Casting method

Images



Publication data including kind & date

WO2007122736	A1	2007-11-01	WO2007122736
WO2007126114	A1	2007-11-08	WO2007126114
CA2650425	A1	2007-11-08	CA2650425
EP2011588	A1	2009-01-07	EP2011588
CN101426599	A	2009-05-06	CN101426599
US20090165989	A1	2009-07-02	US20090165989
JPWO2007126114	A1	2009-09-17	JP2007126114W
CN102728822	A	2012-10-17	CN102728822
JP5109068	B2	2012-12-26	JP5109068
EP2011588	A4	2013-04-10	EP2011588
US20130276939	A1	2013-10-24	US20130276939
CN102728822	B	2016-05-11	CN102728822B
EP2011588	B1	2016-11-16	EP2011588



Abstract

(EP2011588)

This invention is concerned with the productions of unidirectionally solidified castings and remelting-processed ingots such as ESR or VAR, which has paid special attention to the liquid flow phenomena within solid-liquid coexisting phase (mushy phase) during solidification, and made it clear for the first time that by applying high static magnetic field onto the whole mushy phase, the extremely slow interdendritic liquid flow responsible for the formation of macrosegregation can be suppressed, and thereby that the macrosegregation such as freckles can completely be eliminated. Thus, this invention provides with a novel casting technology for producing high quality castings and ingots without macrosegregation.

Inventors

EBISU YOSHIO

Latest standardized assignees - inventors removed

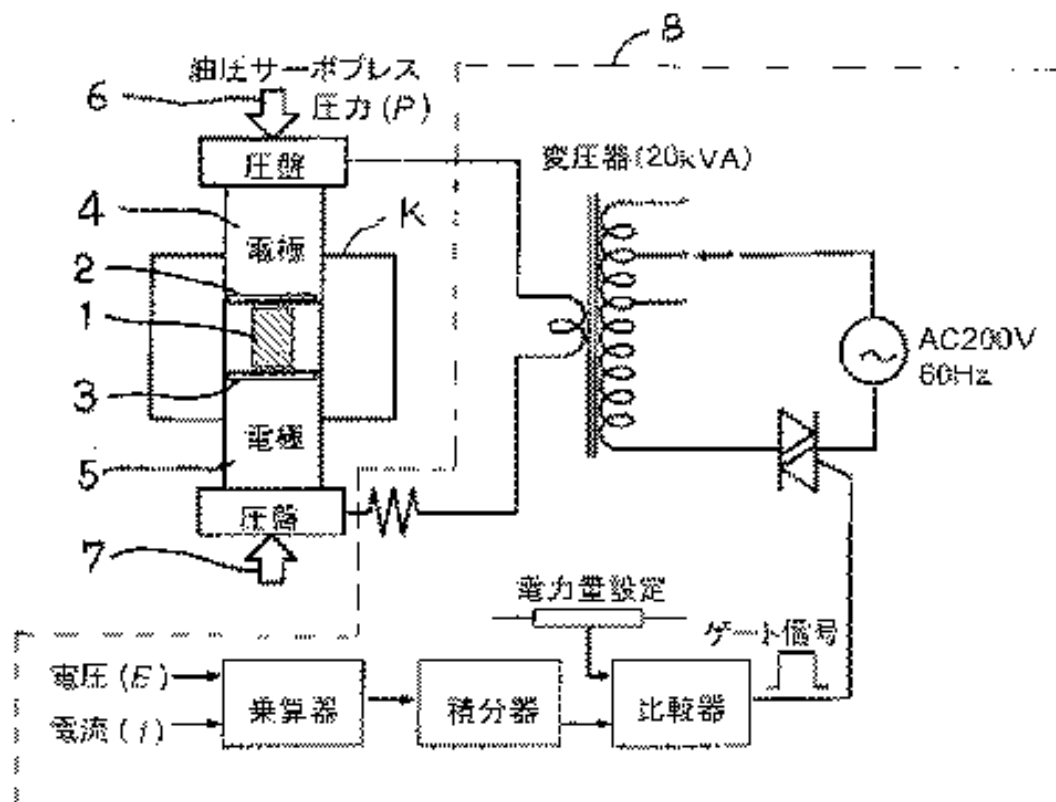
EBIS

Family 16/25 - FAMPAT - ©Questel

Title

(JP2004160462)

Method and device for electrically hot-forming metallic bulk material

Images**Publication data including kind & date**

JP2004160462

A 2004-06-10 JP2004160462

**Abstract**

(JP2004160462)

PROBLEM TO BE SOLVED: To provide a method and a device that can stably and surely heat a metallic bulk material in a short period of time in order to be press-formed by heating/softening it.

SOLUTION: The method comprises: a process for deciding energy that heats a metallic bulk material in advance to a target heated state; and a process for providing electric energy that generates the same Joule's heat as the predetermined energy in the metallic bulk material by adjusting a voltage and a current and energizing for a prescribed time, with the metallic bulk material clamped by a plurality of electrodes.

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Inventors

MAKI SEIJIRO

MORI KENICHIRO

MAKINO YASUIKU

Latest standardized assignees - inventors removed

SINTOKOGIO

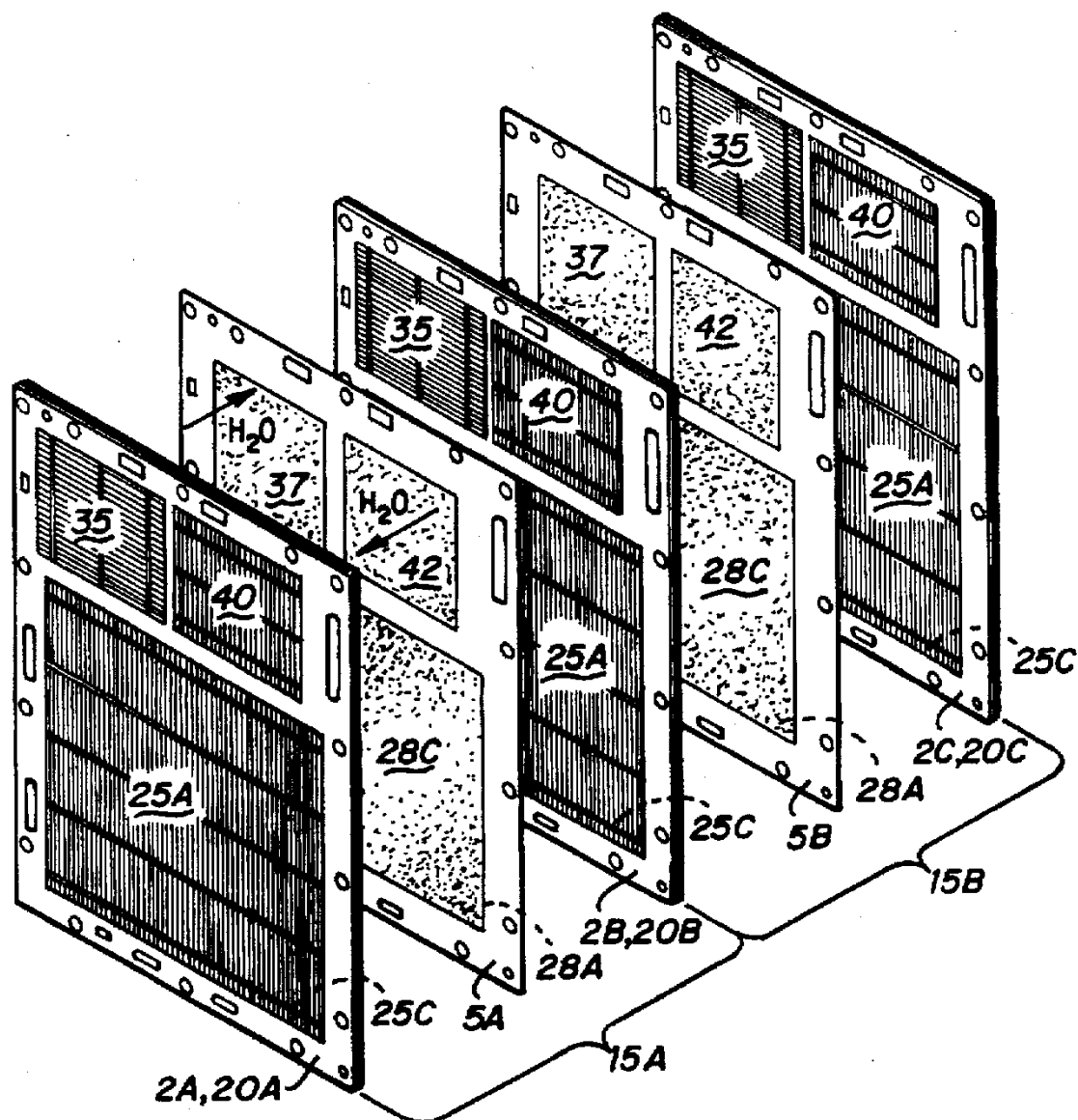
Family 17/25 - FAMPAT - ©Questel

Title

(EP-783770)

Fuel cells employing integrated fluid management platelet technology

Images



Publication data including kind & date

WO9612316	A1	1996-04-25	WO9612316
CA2202380	A1	1996-04-25	CA2202380
AU4193996	A	1996-05-06	AU9641939
TW301807	B	1997-04-01	TW-301807
MX9702720	A	1997-06-28	MX9702720
EP0783770	A1	1997-07-16	EP-783770
US5683828	A	1997-11-04	US5683828
CN1164296	A	1997-11-05	CN1164296
TW329567	B	1998-04-11	TW-329567
JPH10507573	A	1998-07-21	JP10507573
US5858567	A	1999-01-12	US5858567
US5863671	A	1999-01-26	US5863671
US6051331	A	2000-04-18	US6051331
RU2174728	C2	2001-10-10	RU2174728
EP0783770	A4	2003-05-28	EP-783770
IN2521/DEL/1996	A	2016-08-31	IN1996DE02521



Abstract

(EP-783770)

Fuel cell stacks (1) comprising stacked separator/membrane, electrode assembly cells in which the separators comprise a series of stacked thin sheet platelets (30-1 and 30-7) having individually configured serpentine micro-channel reactant gas humidification (35, 40), active area (25) and cooling fields therein. The individual platelets are stacked with coordinate features precisely aligned in contact with adjacent platelets and bonded to form a monolithic separator. Post bonding processing includes passivation, such as nitriding. Preferred platelet material is 4-25 mil Ti in which the features, serpentine channels (52), tabs, lands (54), vias (61, 63, 65), manifolds and holes, are formed by chemical or laser etching, cutting, pressing or embossing, with combinations of depth and through-etching being preferred. The platelet manufacturing process is continuous and fast. By employing CAD based platelet design and photolithography, rapid change in feature design can accommodate a wide range of thermal management and humidification techniques. 100 cell H₂-O₂/Air PEM fuel cell stacks of this IFMT platelet design will exhibit outputs on the order of .75 kW/kg, some 3-6 times greater than current graphite plate PEM stacks.

Inventors

SPEAR REGINALD G JR

MUEGGENBURG H HARRY

HODGE REX

Latest standardized assignees - inventors removed

H POWER

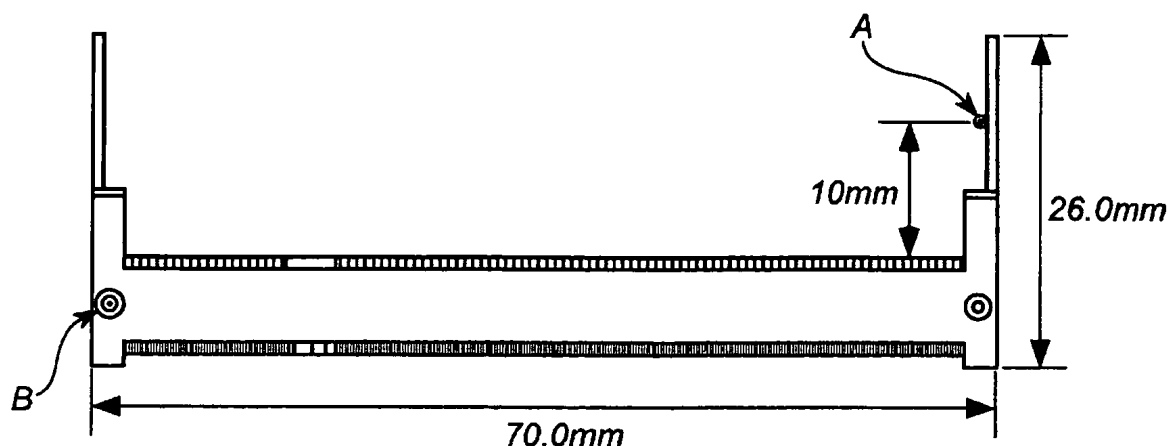
Family 18/25 - FAMPAT - ©Questel

Title

(WO200823839)

Asymmetric electronic component

Images



Publication data including kind & date

WO2008023839	A1	2008-02-28	WO200823839
TW200819498	A	2008-05-01	TW200819498
US20090197471	A1	2009-08-06	US20090197471
CN101506311	A	2009-08-12	CN101506311
JPWO2008023839	A1	2010-01-14	JP2008023839W
US7980897	B2	2011-07-19	US7980897
CN101506311	B	2011-12-28	CN101506311B
JP5385609	B2	2014-01-08	JP5385609
TWI472574	B	2015-02-11	TWI472574



Abstract

(WO200823839)

A material capable of **molding** of articles, including even an asymmetric electronic component, exhibiting high mechanical properties and a low warpage deformation and excelling in all performances, such as heat resistance and fluidity. In particular, there is provided an asymmetric electronic component formed from a liquid crystal polymer composition comprising (A) fibrous filler of 5 to 30 μm average fiber diameter and 250 to 350 μm weight average fiber length excluding portion of 10 μm or less fiber length wherein the ratio of portion of 700 μm or greater fiber length is within 5 wt.% and (B) plate filler of 0.5 to 200 μm average particle diameter, the total amount of filling ingredients (A) and (B) ranging from 40 to 60 wt.% based on the composition, the weight fraction of ingredient (A) ranging from 10 to 20 wt.%, the weight fraction of ingredient (B) ranging from 30 to 40 wt.%, which asymmetric electronic component has no symmetry on any of the axial plane XY, axial plane YZ and axial plane XZ of shaped item.

Inventors

FUKATSU HIROKI

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Latest standardized assignees - inventors removed

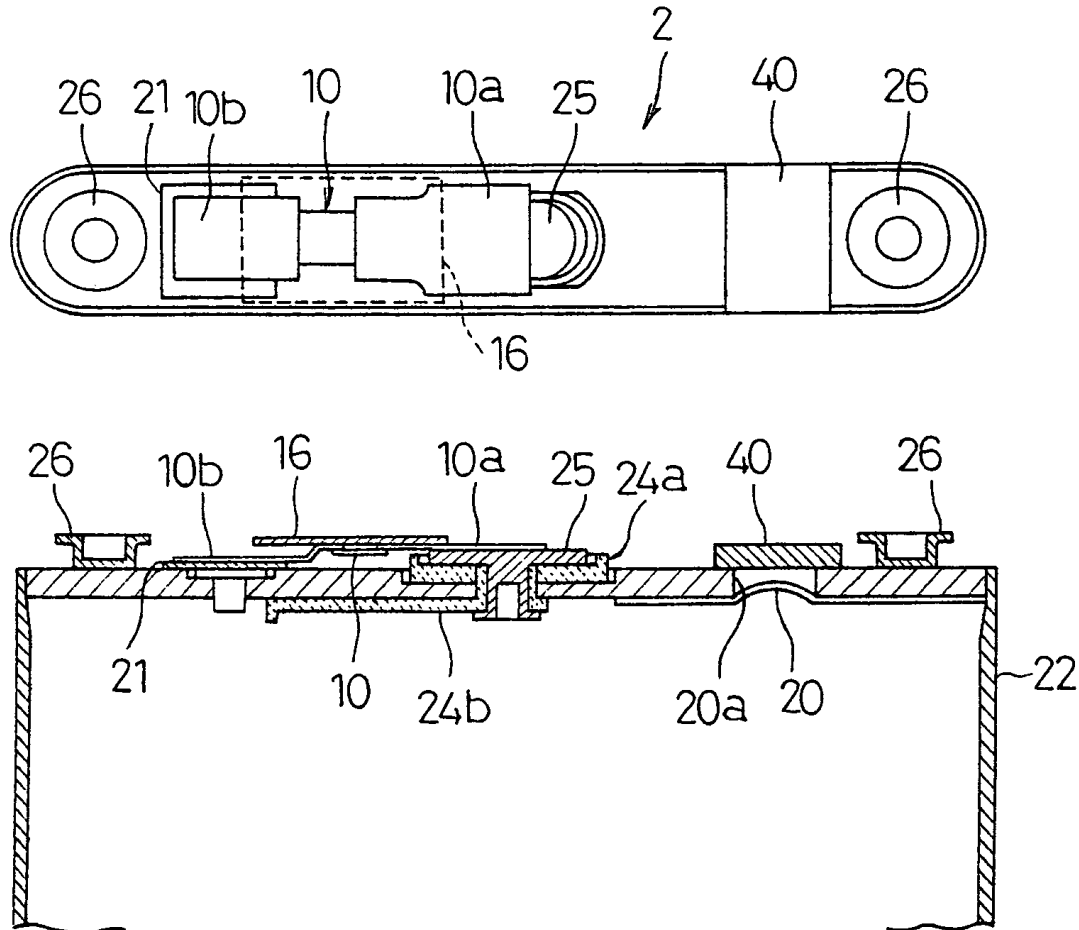
C O POLYPLASTICS

Family 19/25 - FAMPAT - ©Questel

Title

(EP1492176)

Battery pack

Images

Publication data including kind & date

WO03081695	A1	2003-10-02	WO200381695				
JP2004006213	A	2004-01-08	JP2004006213				
KR20040103940	A	2004-12-09	KR20040103940				
EP1492176	A1	2004-12-29	EP1492176				
US20050151514	A1	2005-07-14	US20050151514				
CN1643710	A	2005-07-20	CN1643710				
CN1280928	C	2006-10-18	CN1280928C				
US7248021	B2	2007-07-24	US7248021				
KR100871526	B1	2008-12-05	KR100871526				
EP1492176	A4	2009-08-05	EP1492176				
JP4589596	B2	2010-12-01	JP4589596				
EP1492176	B1	2013-09-04	EP1492176				

Abstract

(EP1492176)

A battery pack comprises (A) a secondary battery formed by safety valve (20) having a release port (20a) for releasing abnormal voltage in a side a battery can (22) holding a power generation element. A battery pack comprises (A) a secondary battery formed by safety valve (20) having a release port (20a) for releasing abnormal voltage in a side a battery can (22) holding a power generation element wherein the safety valve is located in the sealing plate (23) at the opening of the can, and a substrate (3) forming external connection terminal is located on the sealing plate wherein the substrate is integrated with resin mould filled in the gap between the sealing plate and the resin.

Inventors

KOZU KATSUMI

ISHIMARU TAKESHI

KATAOKA SATOSHI

TORIYAMA KOICHI

MORI IICHIRO

Latest standardized assignees - inventors removed

PANASONIC

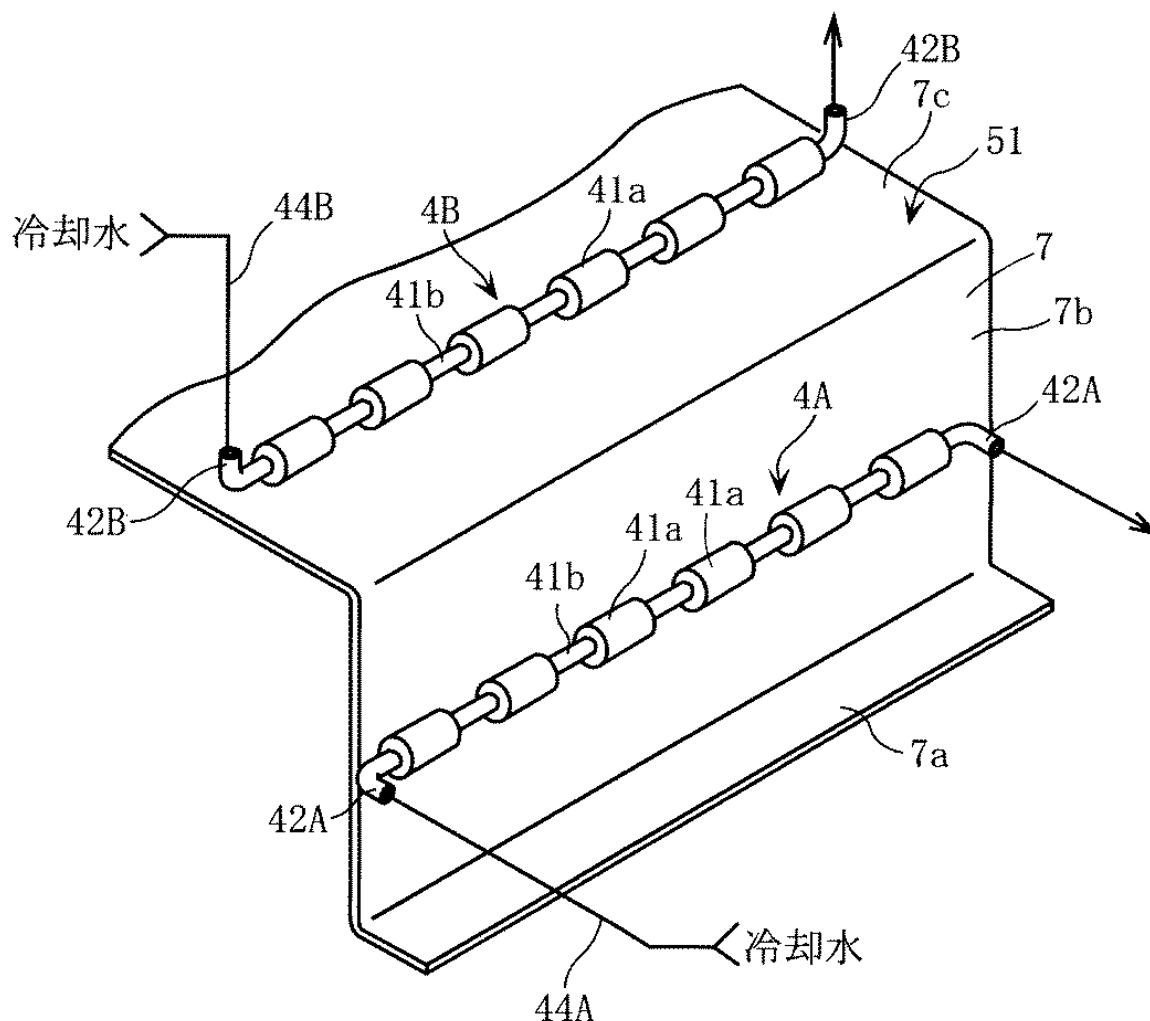
Family 20/25 - FAMPAT - ©Questel

Title

(JP2013213252)

Quenching device

Images



Publication data including kind & date

JP2013213252 A 2013-10-17 JP2013213252
 JP6046364 B2 2016-12-14 JP6046364



Abstract

(JP6046364)

PROBLEM TO BE SOLVED: To provide a quenching device capable of reducing a cost required in an equipment for forming and quenching metal parts and a running cost, and appropriately obtaining metal parts with high strength and high quality. **SOLUTION:** A quenching device 1 is constituted so as to heat a quenching object part 51 by making a pair of electrodes 4A and 4B abut to both sides of the quenching object part 51 in a metal part 7, and by turning on electricity between the pair of electrodes 4A and 4B. Each of the pair of electrodes 4A and 4B is divided into a plurality of contact parts 41a in contact with the metal part 7, and a plurality of noncontact parts 41b not contacting with the metal part 7, and the plurality of the contact parts 41a and the noncontact parts 41b are alternately arranged.

Inventors

WAKITANI SOICHIRO

Latest standardized assignees - inventors removed

DAIHATSU MOTOR

Family 21/25 - FAMPAT - ©Questel

Title

(EP1633010)

Composite porous body, member for gas diffusion layer, cell member, and their manufacturing methods

Images

MITSUBISHI MATERIALS

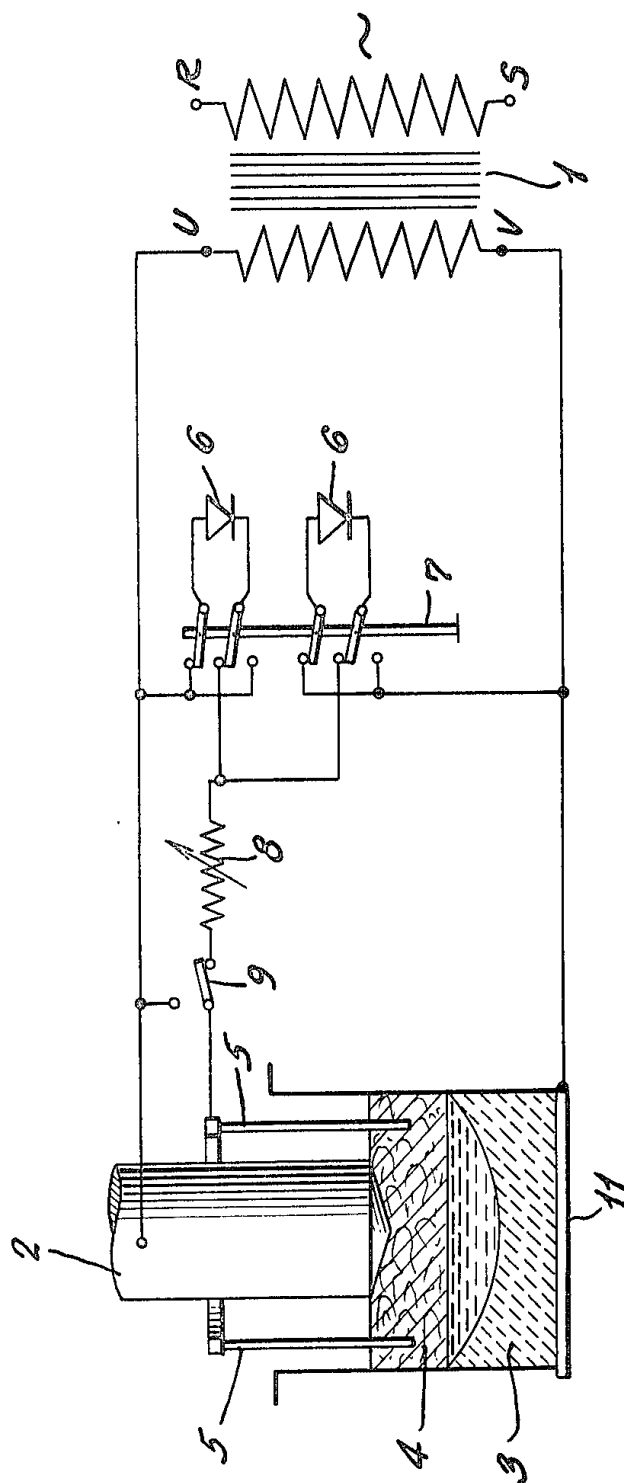
Family 22/25 - FAMPAT - ©Questel

Title

(US3571475)

Electroslag refining apparatus

Images

Fig. 1.

INVENTORS

WOLFGANG HOLZGRUBER
PETER MACHNERBY *Hess, Downing & Seibold*

Publication data including kind & date

BE719167	A	1969-01-16	BE-719167
FR1602108	A	1970-10-12	FR1602108
DE1758720	A1	1971-03-11	DE1758720
US3571475	A	1971-03-16	US3571475
GB1230183	A	1971-04-28	GB1230183
AT289874	B	1971-05-10	AT-289874
SE347017	B	1972-07-24	SE-347017
DE1758720	B2	1973-02-22	DE1758720
DE1758720	C3	1975-01-23	DE1758720

**Abstract**

(US3571475)

High melting point solid metal is maintained immersed in an electrically conducting, electrolyzable slag and is melted to form and maintain a pool of molten metal under said slag. An auxiliary electrode is maintained immersed in said slag. Unidirectional electric current is conducted through said auxiliary electrode and through said slag to induce fusion electrolysis in said slag so as to control ionic chemical reactions in a predetermined polarity direction taking place in said slag.

Inventors

HOLZGRUBER WOLFGANG

MACHNER PETER

Latest standardized assignees - inventors removed

BOEHLER

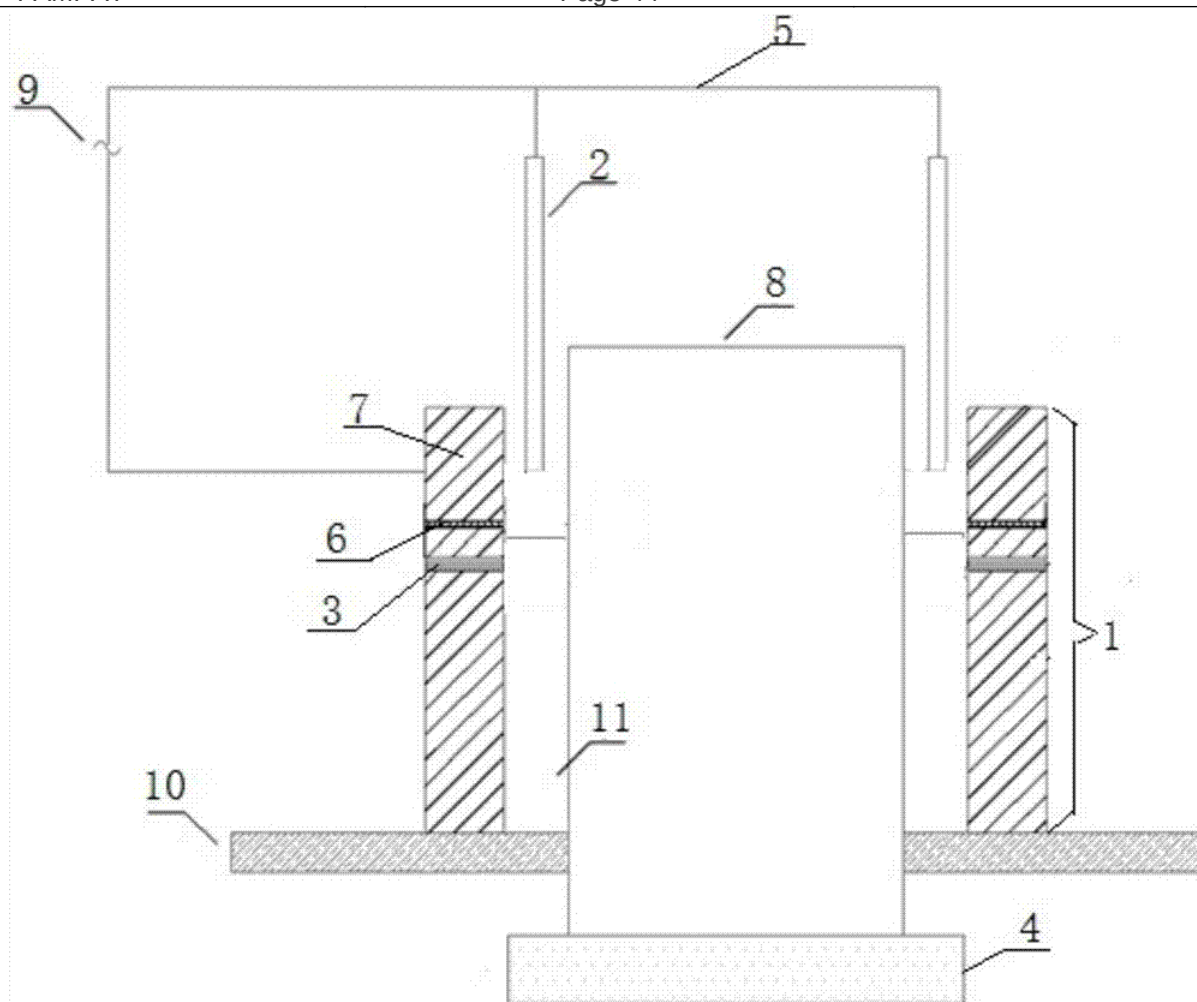
Family 23/25 - FAMPAT - ©Questel

Title

(CN107262686)

Equipment and method for manufacturing composite steel ingot

Images

**Publication data including kind & date**

CN107262686

A

2017-10-20

CN107262686

**Abstract**

(CN107262686)

The invention relates to equipment for manufacturing a composite steel ingot. The equipment comprises a conductive crystallizer which is a barrel-shaped structure provided with an upper opening, a lower opening and a first diameter and a consumable electrode component comprising multiple consumable electrodes and a first power which is electrically connected with the consumable electrode component; the multiple consumable electrodes extend into the barrel-shaped structure from an upper opening of the conductive crystallizer and is a first distance away from an inner circumferential surface of the barrel-shaped structure; and the first distance is smaller than half of the first diameter. The invention further provides a method for manufacturing the composite steel ingot which comprises the steps that the consumable electrodes are inserted in slags; a power supply loop of the conductive crystallizer is conducted to realize composition of a core rod and outer-layer molten steel; and good match of the melting speed of the consumable electrodes and ingot drawing speed is realized through a liquid level detector so as to ensure stability of the steel ingot composition process. By adopting the equipment and method, manufacture of the large steel ingot can be realized; stable and orderly operation of the multi-layer composition process is ensured; problems of segregation, loosening and shrinkage cavities of the large-sized steel ingot are solved; and meanwhile, production efficiency is improved, and composition quality is ensured.

Inventors

DONG YANWU

JIANG ZHOUHUA

HOU ZHIWEN

CAO YULONG

HOU DONG

CAO HAIBO

YAO KEAN

Latest standardized assignees - inventors removed

NORTHEASTERN UNIVERSITY

Family 24/25 - FAMPAT - ©Questel

Title

(EP2475223)

Organic el element sealing member

Images

$$\Delta V (\%) = [(W3 \cdot W4) - (W1 \cdot W2)] \times 100 / (W1 \cdot W2).$$

Publication data including kind & date

WO2011027815	A1	2011-03-10	WO201127815				
TW201117642	A	2011-05-16	TW201117642				
KR20120055720	A	2012-05-31	KR20120055720				
EP2475223	A1	2012-07-11	EP2475223				
CN102640564	A	2012-08-15	CN102640564				
US20120207991	A1	2012-08-16	US20120207991				
JPWO2011027815	A1	2013-02-04	JP2011027815W				
US20140167021	A1	2014-06-19	US20140167021				
EP2475223	A4	2015-09-16	EP2475223				
TWI513360	B	2015-12-11	TWI513360				
CN102640564	B	2016-01-20	CN102640564B				

Abstract

(EP2475223)

The present invention provides a sealing member for organic EL elements that enables organic EL elements, in particular, organic EL elements for illumination devices to maintain stable luminescence over a long period and that can be fabricated at reduced cost. The sealing member for organic EL elements of the present invention includes a barrier film including a plastic film and at least one thin metal layer, and a curable resin composition layer on the barrier film. The curable resin composition layer has a thickness of 5 to 100 μm and the curable resin composition exhibits nonfluidity at 25°C in an uncured state and gains fluidity at an elevated temperature in the range of 40 to 80°C.

Inventors

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HORIE KENICHI

Latest standardized assignees - inventors removed

THREEBOND FINE CHEMICAL

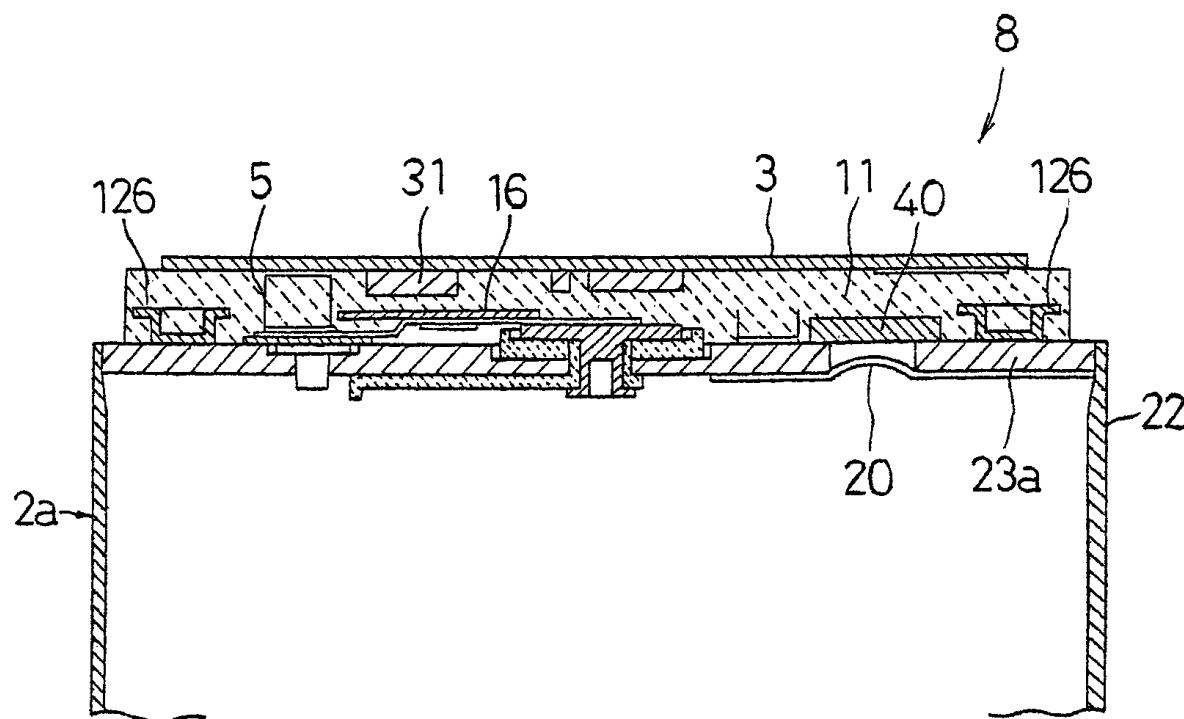
Family 25/25 - FAMPAT - ©Questel

Title

(EP1487033)

Battery and method of manufacturing the battery

Images



Publication data including kind & date

WO03069698	A1	2003-08-21	WO200369698
JP2004006244	A	2004-01-08	JP2004006244
KR20040081105	A	2004-09-20	KR20040081105
EP1487033	A1	2004-12-15	EP1487033
US20050106454	A1	2005-05-19	US20050106454
CN1630955	A	2005-06-22	CN1630955
EP1487033	A4	2008-10-08	EP1487033
KR100894355	B1	2009-04-22	KR100894355
JP4440548	B2	2010-03-24	JP4440548
CN1630955	B	2010-04-14	CN1630955B
US7759001	B2	2010-07-20	US7759001



Abstract

(EP1487033)

A circuit substrate (3) being electrically connected to a rechargeable battery (2) is arranged upon a sealing plate (23) with a gap therebetween and united with the rechargeable battery (2) by filling resin in the gap. A primary mold (11) formed by the resin is firmly retained by undercut portions formed in engaging protrusions (26). The engaging protrusions (26) may be formed by welding separate engaging members (126, 126a, 126b, 126c, 66, 68). <IMAGE>

Inventors

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Latest standardized assignees - inventors removed

PANASONIC