

Diego Gonzalez

Search history

Search 1: STAC=(Hot and press and forming and joule and temperature) (Results 13)

Title: INDUSTRIAL VAPOR CONVEYANCE AND DEPOSITION

Abstract: A process for deposition and condensation and reaction and separation and distillation employing at least two chambers separated by a diaphragm with at least one separation wall and at least one orifice or flow duct or plurality thereof, said process providing a controlled and stationary conveyance capacity of an uncondensed intermediary phase for a product or by-product with a controlled concentration, structure or microstructure, for example, said conveyance capacity relying on a controlled pressure of an atmosphere in the at least two chambers on both side of said diaphragm and on a novel diaphragm and condenser technology and a **temperature** control of one or more chamber walls or said diaphragm or parts of said diaphragm being transversed by said uncondensed intermediary phase. For a given pressure (difference) in the at least two chambers, surface roughness and **form** (such as cross and transverse section including widening, nozzle, funnel, flow and guide elements, heat exchanger, bifurcation and bend) and geometry including **form** and size of such structural part components of an orifice or flow duct or a combination of them affect the driving force for the resulting rate of conveyance and, for a given conveyance capacity, the resulting rate of deposition or condensation or reaction or separation or distillation via said uncondensed intermediary phase per orifice or flow duct. The new process includes (i) a condensation-free formation of a reservoir of an uncondensed phase under controlled flow conditions in front of a diaphragm, (ii) local pulse forces in an orifice or flow duct being controlled by local flow speed or local flow density or local flow pressure of said uncondensed phase to provide macroscopic control of an uncondensed intermediary and final phase or material and (iii) controlled conveyance and production rates under conditions of said local control and being independent from gravitational acceleration so orientation of individual modules or units or assembly of a production plant.

Classifications:**International (IPC 8-9):** C22C21/00 C22C23/00 C22C23/06

C22C45/00 C23C14/14 C23C14/22 (Advanced/Invention);

C22C21/00 C22C23/00 C22C45/00 (Advanced/Non-invention)

International (IPC 1-7): C22C21/00 C22C23/00 C22C23/06

C22C45/00 C22F3/00 C23C14/14 C23C14/22 C23C14/54

C23C16/00 F15D1/02

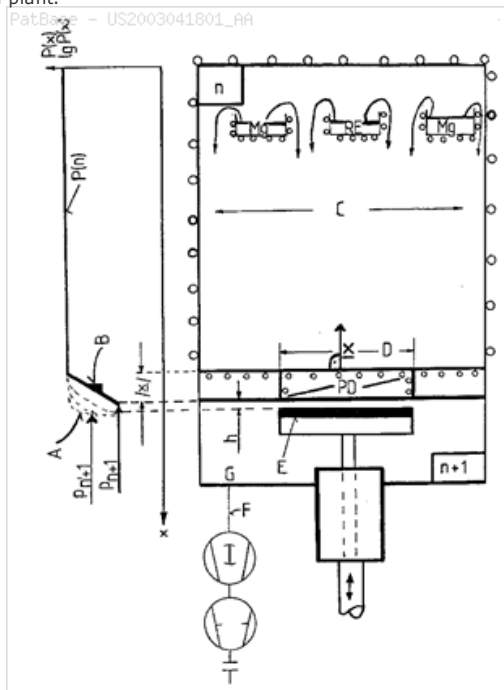
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137/561A 138/38 138/38S 138/4 138/40 138/40S 138/42 138/44

148/404 148/406 148/42 148/420 148/420S 148/437 148/437S

148/666 148/667 420/402 420/407 420/407S 427/248.1

427/248.100S 427/255.5 95/45 96/4

**Family:**

Publication number	Publication date	Application number	Application date
AU199537084 A1	19960304	AU19950037084	19950719
AU199539734 A1	19960304	AU19950039734	19950731
EP0772698 A1	19970514	EP19950926967	19950719
EP0815282 A2	19980107	EP19950944461	19950731
JP10506150 T2	19980616	JP19960506141T	19950719
US2003041801 AA	20030306	US20010766644	20010123
US2003183306 AA	20031002	US20020265467	20021007
US6248399 BA	20010619	US19970776381	19970303
US6544357 BA	20030408	US19970776382	19970131
US6908516 BB	20050621	US20020265467	20021007
US6941973 BB	20050913	US20010766644	20010123
WO9604409 A1	19960215	WO1995EP02882	19950719
WO9604410 A1	19960215	WO1995EP03076	19950731

Priority:

EP19940111991	19940801	EP19950926967	19950719	WO1995EP02882	19950719
EP19950944461	19950731	WO1995EP03076	19950731	US19970776382	19970131
US19970776381	19970303	US20010766644	20010123	US20020265467	20021007

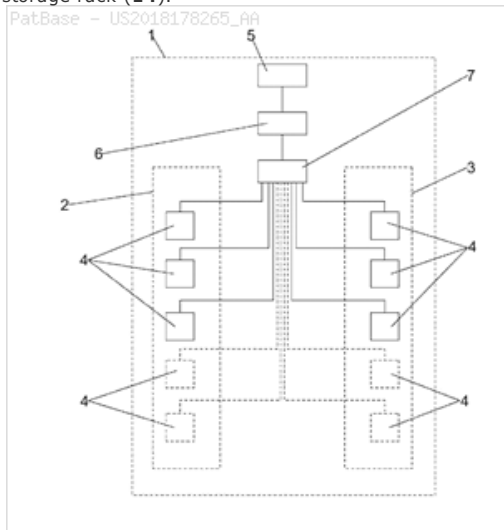
Probable Assignee: HEHMANN FRANZ**Assignee(s):** (std): FRANZ HEHMANN ; HEHMANN FRANZ ; HEHMANN FRANZ DR ; WEIDEMANN MICHAEL**Assignee(s):** HEHMANN FRANZ IBURGER STRASSE**Inventor(s):** (std): WEIDEMANN MICHAEL ; HEHMANN FRANZ DR ; HEHMANN FRANZ ; MICHAEL WEIDEMANN ; FRANZ HEHMANN**Agent(s):** FOLEY AND LARDNER LLP; FOLEY AND LARDNER**Designated states:** AT AU BE CA CH CN DE DK ES FR GB GR IE IT JP KR LI LU MC NL PT RU SE US

Title: **HOT** STAMPING SYSTEM FOR PRODUCTION OF A PARTS ASSEMBLY

Abstract: A **hot** stamping system of automotive parts to enable the production of the body in white and moving parts, which **form** the body of a car in a single production plant (1) from blanks. Said system consists of two by two operating groups (2 and 3) of equipment, namely: a group for the fixed parts and a group for the moving parts, each composed of production units (4), which are fed (5) with blanks, previously individually cut into the required dimensions (5) and inspected (6), for entry into the stamping tool (matrix) in accordance with the shape and dimensions of the part to be made in the respective unit, distributed (7) both to the group of fixed parts and to the group (3) of moving parts. Each of the production units comprises: a blank feed rack (8), two to three handling robots (9, 11 and 13), a **joule** heating device (10), A **press** (12) with the tool (matrix) relative to the workpiece to be stamped, and a storage rack (14).

Classifications:

International (IPC 8-9): B21D22/00 B21D22/02 B21D22/20
B21D24/00 B21D24/12 B21D37/16 B21D43/00 B21D43/04
B21D47/00 B21D53/88 B41F19/08 B41F21/00 B41F33/06 C21D1/42
C21D1/673 C21D9/00 (Advanced/Invention)
CPC: B21D53/88 B21D47/00 B21D22/208 C21D9/0018 C21D9/48
B21D22/022 B21D35/001 B21D43/105 C21D1/673 B21D37/16



Family:

Publication number	Publication date	Application number	Application date
AR108555 AA	20180829	AR2017P101385	20170523
AU2017201970 AA	20180712	AU20170201970	20170323
BR102016030406 A2	20180717	BR20161030406	20161223
CA2968943 AA	20180623	CA20172968943	20170529
CO20170005540 A1	20170818	CO20170005540	20170602
EP3339454 A1	20180627	EP20170160043	20170309
JP2018103261 A2	20180705	JP20170128261	20170630
US2018178265 AA	20180628	US20170604266	20170524

Priority:

BR20161030406 20161223

Probable Assignee: AETHRA SIST AUTOMOTIVOS S A

Assignee(s): (std): AETHRA SIST AUTOMOTIVOS S A

Assignee(s): AETHRA SISTEMAS AUTOMOTIVOS S A ; SPORTELLI PIETRO

Inventor(s): (std): PIETRO SPORTELLI ; SPORTELLI PIETRO

Agent(s): AJ PARK; MOFFAT AND CO; JAIME EDUARDO DELGADO VILLEGAS; PEREIRA DA CRUZ JOAO; R AND C IP LAW FIRM

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 ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Title: MULTI-STATION CONTINUOUS **HOT** STAMPING PRODUCTION LINE AND METHOD

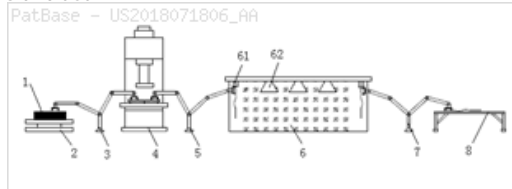
Abstract: A production line sequentially includes a feeding platform, a feeding robot, a **pressing** unit, a conveying robot, a quenching device, a discharging robot, and a conveyor belt. The **pressing** unit includes a heating device, a die device, and at least one **press** used for mounting the die device. The heating device is used for wholly or partially heating the preformed blank to produce a **hot** blank, and the die device is used for stamping the **hot** blank, holding the **hot** blank at a certain pressure, and shaving and punching the **hot** blank, so as to produce a **hot** stamped part. The production line can continuously achieve rapid heating, stamping, pressure holding, shaving, punching, and quenching. Heating efficiency is improved, and a transferring process before stamping the **hot** blank is avoided.

Classifications:

International (IPC 8-9): B21D22/02 B21D35/00 B21D37/16

B21D43/00 B21D43/10 B21D53/88 (Advanced/Invention)

CPC: B21D22/022 B21D37/16 B21D35/005 B21D43/05 C21D9/00
B21D53/88 B21D43/105



Family:

Publication number	Publication date	Application number	Application date
■ CN105215160 A	20160106	CN201510715632	20151029
■ US2018071806 AA	20180315	US20160560038	20160705
■ WO17071294 A1	20170504	WO2016CN088614	20160705

Priority:

CN201510715632 20151029 WO2016CN088614 20160705

Probable Assignee: UNIV WUHAN TECH

Assignee(s): (std): UNIV WUHAN TECH ; WUHAN UNIV OF TECHNOLOGY

Inventor(s): (std): ZHU GENPENG ; SONG YANLI ; SHEN YUHAN ; LU JUE ; HUA LIN ; DAI DINGGUO

Agent(s): HUBEI WUHAN YONGJIA PATENT AGENCY CO LTD

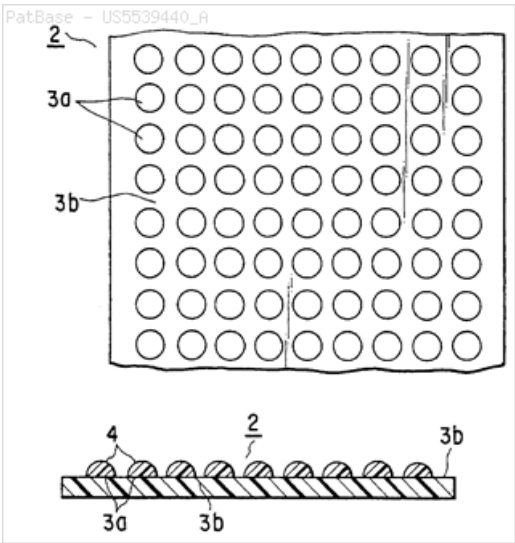
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Title: Image forming apparatus having colorant holding regions and a colorant repelling region

Abstract: An image forming apparatus includes an image carrier, a means for forming colorant holding regions on the image carrier, the colorant holding regions having better ink or developing agent holding properties than the image carrier, a means for supplying a colorant to the colorant holding regions, and a means for transferring the colorant, held in the colorant holding regions, onto a printing medium.

Classifications:

International (ipc 8-9): B41C1/10 B41J2/005 B41J2/01 B41J2/325 B41J27/00 B41J27/18 B41M5/00 G03G15/34 H04N1/034 (Advanced/Invention); B41C1/10 B41J2/005 B41J2/01 B41J2/325 B41J27/00 B41M5/00 G03G15/00 H04N1/032 (Core/Invention)
International (ipc 1-7): B41J2/01 B41J2/325 B41J27/00 B41J27/18 B41M5/00 G01D15/06 H04N1/034
CPC: B41C1/1066 B41J2/0057 G03G15/34
European: B41C1/10N B41J2/005 B41J2/005T G03G15/34
US: 346/135.1 347/112 347/153 347/154 347/155 347/171



Family:

Publication number	Publication date	Application number	Application date
JP6092006 A2	19940405	JP19930054372	19930315
US5539440 A	19960723	US19930039769	19930330

Priority:

JP19920072025 19920330 JP19930054372 19930315

Probable Assignee: TOSHIBA CORP

Assignee(s): (std): TOSHIBA CORP ; TOSHIBA KK ; TOSHIBA TEC CORP

Assignee(s): TOSHIBA TEC KABUSHIKI KAISHA ; TOSHIBA TEC KK ; KABUSHIKI KAISHA TOSHIBA

Inventor(s): (std): HIGUCHI KAZUHIKO ; HIRAHARA SHUZO ; ISHII KOICHI ; KOIKE YUZO ; NAKAO HIDEYUKI ; SAITO TUTOMU

Title: INKJET PRINTHEAD WITH HOLLOW DROP EJECTION CHAMBER **FORMED** PARTLY OF ACTUATOR MATERIAL

Abstract: An inkjet drop ejection apparatus with a chamber, an actuator, and a nozzle, where drops of ink are ejected through the nozzle, and where the chamber comprises a hollow structure **formed** on a semiconductor substrate. The chamber is partly **formed** of the same material as the actuator, simplifying the fabrication process.

Classifications:

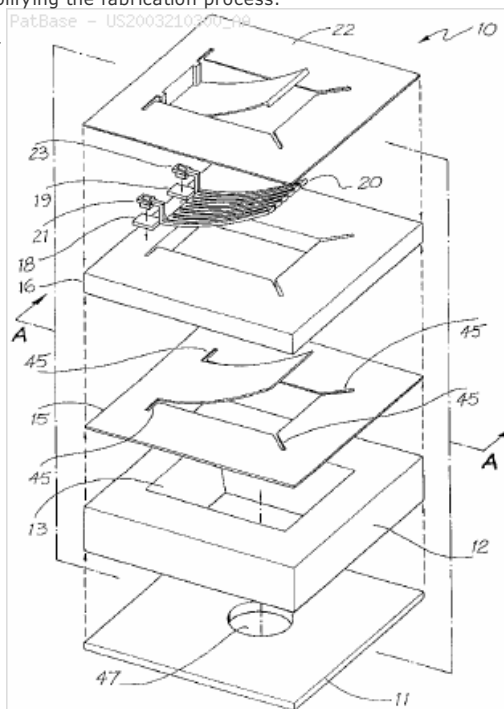
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International (IPC 1-7): B41J2/04 B41J2/145 B41J2/15 G01D15/00 G11B5/127

CPC: Y10T29/49083 Y10T29/49117 Y10T29/49128 Y10T29/49169 Y10T29/49172 Y10T29/49401 B41J2/04528 B41J2/04541 B41J2/04543 B41J2/04563 B41J2/04585 B41J2/04591 B41J2/04593 B41J2002/14491 B41J2/14427 B41J2/16 B41J2/1623 B41J2/1626 B41J2/1628 B41J2/1629 B41J2/1631 B41J2/1632 B41J2/1635 B41J2/1637 B41J2/1639 B41J2/1642 B41J2/1643 B41J2/1645 B41J2/1646 B41J2/1648 B41J2/16585 B41J2/17596 B41J2002/041 B41J2002/14346 B41J2002/14435 B41J2002/14443 B41J2202/21 G06F21/79 G06F21/86 G06F2221/2129 G06K1/121 G06K7/14 G06K7/1417 G06K19/06037 G07F7/08 G07F7/086 G07F7/12 G11C11/56 H04N5/225 H04N5/2628 B41J2/14 B41J2/135 B41J2/14314 B41J2/17513 B42D2035/34

European: B41J11/00A B41J11/70 B41J15/04 B41J2/045D26 B41J2/045D34 B41J2/045D35 B41J2/045D47 B41J2/045D60 B41J2/045D64 B41J2/045D65 B41J2/14 B41J2/14E B41J2/14S B41J2/16 B41J2/16M1 B41J2/16M3 B41J2/16M3D B41J2/16M3W B41J2/16M4 B41J2/16M5 B41J2/16M6 B41J2/16M7 B41J2/16M7S B41J2/16M8C B41J2/16M8P B41J2/16M8S B41J2/16M8T B41J2/16S B41J2/175C B41J2/175C2 B41J3/42B B41J3/44B B42D15/10 G06F21/79 G06F21/86 G06K1/12B G06K19/06C3 G06K19/073 G06K7/14 G06K7/14A2C G07F7/08 G07F7/08B G07F7/12 G11C11/56 H04N1/32C H04N1/32C16 H04N5/225 H04N5/262T L41J2/04M L41J2/14I L41J2/14S1 L41J2/14S2 L41J2/14Y L41J2/165L L41J2/175P L41J202/21 L42D35/34 S06F221/2129 T04N1/00C T04N201/00C T04N201/00C22 T04N201/00W1 T04N201/32C12 T04N201/32C3H T04N201/32C6 T04N201/32C9B

US: 216/27 216/27P 216/56 347/20 347/20P 347/40 347/40P 347/53 347/54 347/54P 347/54S 347/56 347/56P 347/62 347/63 347/65 347/94 347/94P 348/E05.024 348/E05.055 348/E5.024 348/E5.055 348/E50.24 348/E50.24S 348/E50.55 348/E50.55S



Family:

Publication number	Publication date	Application number	Application date
US2003210300 AA	20031113	US20030407212	20030407
US2005052514 AA	20050310	US20040922882	20040823
US2005093932 AA	20050505	US20040982789	20041108
US2005104922 AA	20050519	US20040922871	20040823
US2005145600 AA	20050707	US20050071261	20050304
US2005157081 AA	20050721	US20040922876	20041112
US2005157082 AA	20050721	US20050922886	20050228
US2005168532 AA	20050804	US20040922875	20040823
US2005168533 AA	20050804	US20050088860	20050325
US2005173372 AA	20050811	US20050071251	20050304
US2005206677 AA	20050922	US20050882774	20050202
US2005264612 AA	20051201	US20040922880	20040823
US2005270334 AA	20051208	US20050159193	20050623
US2007291070 A9	20071220	US20040922871	20040823
US2007291070 AB	20071220	US20040922871	20040823
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US2007291091 AB	20071220	US20040922882	20040823
US7147792 BB	20061212	US20050071251	20050304
US7175774 BB	20070213	US20050071261	20050304
US7219982 BB	20070522	US20050088860	20050325
US7275811 BB	20071002	US20050882774	20050202
US7328975 BB	20080212	US20040922880	20040823
US7334874 BB	20080226	US20040922875	20040823
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US7404625 BB	20080729	US20050159193	20050623
US7410250 BB	20080812	US20040922882	20040823
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Priority:

AU19970007991 19970715	AU19970008004 19970715	AU19970007991 19970715
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US20050159193 20050623		

Probable Assignee: MEMJET TECHNOLOGY LTD

Assignee(s): (std): KIA SILVERBROOK ; SILVERBROOK KIA ; SILVERBROOK RES PTY LTD
Assignee(s): SILVERBROOK RESEARCH PTY LTD ; ZAMTEC LTD ; MEMJET TECHNOLOGY LTD ; SILBERBROOK RESEARCH PTY LTD
Inventor(s): (std): MCAVOY GREGORY J ; MCAVOY GREGORY JOHN ; SILVERBROOK KIA
Inventor(s): MCAVOY GREGORY
Agent(s): SILVERBROOK RESEARCH PTY LTD

Title: COLD FUSION PROCESS IN DENSE BOSON PLASMA

Abstract: The invention relates to a method and device for generating a continuous fusion process in a superconducting plasma. The vortex plasma is generated by an electrical high-voltage discharge over a discharge gap (4). Through the discharge gap (4) a cold gas containing nuclear fusion fuel is flowing at high speed. The discharge gap is defined by two electrodes (12) on opposite sides.

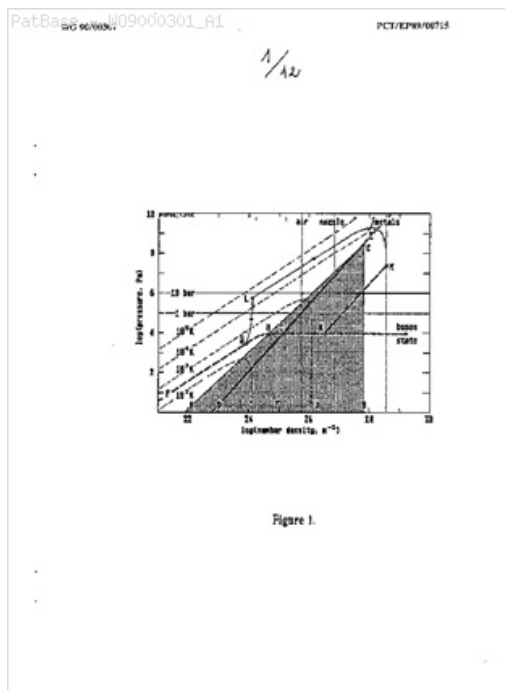
Classifications:

International (IPC 8-9): G21B3/00 H05H1/02 (Advanced/Invention);
G21B3/00 H05H1/02 (Core/Invention)

International (IPC 1-7): G21B1/00 H05H1/02

CPC: G21B3/00 H05H1/02 Y02E30/18

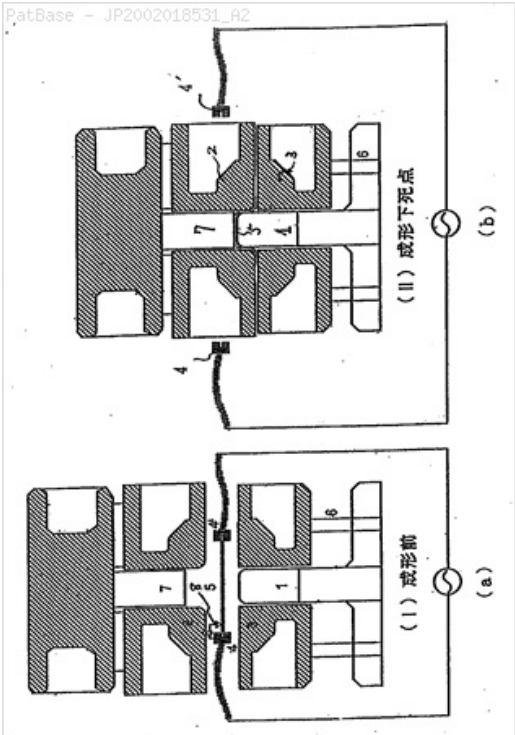
European: G21B3/00 H05H1/02 Y02E30/18



Title: **HOT PRESS FORMING** METHOD OF METAL PLATE

Abstract: PROBLEM TO BE SOLVED: To provide a **hot press forming** method of a material to be worked capable of improving formability of **hot forming** and a dimensional precision after **forming** in obtaining an ultra high strength **press formed** part.SOLUTION: Inside a die or outside/around the die, one or more of electrodes 4, 4' are mounted, by impressing an electric current between the electrodes, a metal plate is heated to a prescribed **temperature** by **joule** heat and then the **hot press forming** is conducted.

Classifications:
International (IPC 8-9): B21D22/20 B21D24/00 B21J1/06 (Advanced/Invention);
B21D22/20 B21D24/00 B21J1/00 (Core/Invention)
International (IPC 1-7): B21D24/00 B21J1/06



Family:

Publication number	Publication date	Application number	Application date
JP2002018531 A2	20020122	JP20000205164	20000706
JP3882474 B2	20070214	JP20000205164	20000706

Priority:

JP20000205164 20000706

Probable Assignee: SUMITOMO METAL IND

Assignee(s): (std): SUMITOMO METAL IND ; SUMITOMO METAL IND LTD

Assignee(s): SUMITOMO METAL INDUSTRIES LTD

Inventor(s): (std): HAMADA KOICHI ; HIROSE YOZO ; KASEDA YOSHIYUKI ; NAKADA MASAHIRO

Title: ELECTRIC JOINING METHOD AND APPARATUS AND A JOINED UNIT OF MEMBERS

Abstract: Disclosed is a novel electric joining method and apparatus that can overcome the defects associated with the prior art while taking advantage of the technology for the pulse excited sintering process such as spark plasma sintering process or the **hot-press** joining process. According to the present invention, an electric joining apparatus for joining a plurality of members to be joined at the joining surfaces thereof, comprises: a pair of current-carrying electrodes 13, 16 capable of contacting with the members so as to apply electricity to the members; a power supply 17 connected to the pair of energizing electrodes for supplying the energizing electrodes with at least either one of a DC current or a pulsated current; and a pressurizing unit 14 for compressing each of the pair of electrodes against the joining surfaces, wherein the pair of members are sandwiched between the energizing electrodes and applied with at least either one of the DC current or the pulsated current from the power supply under a desired pressure, thus to be joined, without using a die made of graphite.

Classifications:

International (IPC 8-9): B21D37/20 B22F7/08 B23K11/02 B23K11/24 B23K20/00 B23P15/24 B29C33/30 C21D9/50 (Advanced/Invention); B23K20/00 C21D9/50 (Advanced/Non-invention); B23K20/00 (Core/Invention)

International (IPC 1-7): B21D37/20 B22F7/08 B23K10/02 B23K11/00 B23K11/02 B23K11/24 B23K20/00 B23K28/00 B23P15/24 B29C33/30 C21D9/50

CPC: Y10T428/12493 B23K11/02 B21D37/20 C21D9/50

European: B21D37/20 B23K11/02 M21D9/50

US: 219/117.1 219/78.02 219/78.020P 219/78.13 219/86.1 219/861 228/193 428/615

PatBase - US2002011468_AA

Patent Application Publication Jan. 31, 2002 Sheet 1 of 5 US 2002/011468 A1

Fig. 1

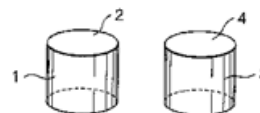
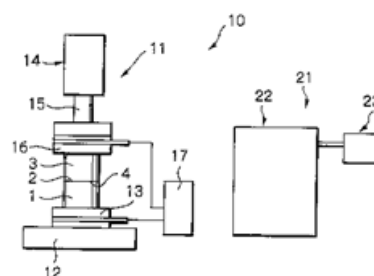


Fig. 2



Family:

Publication number	Publication date	Application number	Application date
AT294045 E	20050515	AT20010112917T	20010605
CN1189285 C	20050216	CN20011021458	20010607
CN1328896 A	20020102	CN20011021458	20010607
DE60110312 D1	20050602	DE20016010312	20010605
DE60110312 T2	20060126	DE20016010312T	20010605
EP1162022 A1	20011212	EP20010112917	20010605
EP1162022 B1	20050427	EP20010112917	20010605
HK1041846 A1	20050603	HK20020103802	20020521
JP2002059270 A2	20020226	JP20000283127	20000919
JP3548509 B2	20040728	JP20000283127	20000919
KR100784745 B1	20071213	KR20010031408	20010605
KR20010111006 A	20011215	KR20010031408	20010605
US2002011468 AA	20020131	US20010871826	20010604
US2003106877 AA	20030612	US20030345333	20030116
US6515250 BB	20030204	US20010871826	20010604
US6899265 BB	20050531	US20030345333	20030116

Priority:

JP20000170000 20000607 JP20000283127 20000919 US20010871826 20010604
KR20010031408 20010605 US20030345333 20030116

Probable Assignee: FUJI ELECTRONIC INDUSTRIAL CO LTD

Assignee(s): (std): DALIAN TECHNOLOGY UNIV ; SPS PROC INC ; SUMITOMO COAL MINING ; SUMITOMO CARBOLIC MINING INDUS ; SUWA NETSUKOGYO KK ; SUMITOMO COAL MINING CO ; SUWANETSU KOGYO CO ; SUWANETSU KOGYO CO LTD

Assignee(s): SUMITOMO COAL MINING CO LTD ; SUMITOMO CARBOLIC MINING IND CO LTD ; SUWA TAISHA BUSH KEY IS NETSU HIGH SCHOOL ; SPS SYNTX INC ; SUMITOMO CARBOLIC MINING INDUSTRY CO LTD ; SPS PROCESSING INC ; SPS PROCESSING INC KAWASAKI ; FUJI ELECTRONIC INDUSTRIAL CO LTD ; S P S NEO TEX BUSH KEY SHAH

Inventor(s): (std): YOSHIHITO MIYASAKA ; TOKITA MASAO ; NISHIYAMA FUMITAKE ; MIYASAKA YOSHITO ; MASAO TOTA ; KARASAWA HITOSHI ; HITOSHI KARASAWA ; YANG WENBIN ; SUN MING ; DONG SHOUHUA

Inventor(s): TOTA MASAO ; MIYASAKA YOSHIHITO ; SHOUHUA DONG ; MING SUN ; YOSHITO MIYASAKA ; WENBIN YANG ; FUMITAKE NISHIYAMA ; MASAO TOKITA

Agent(s): MASUI CHUJI; TOMITA HIROYUKI; SHAMOTO ICHIO; KOBAYASHI YASUSHI; UCHIDA HIROSHI; SUGHRUE MION PLLC

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

Title: METHODS AND DEVICES USED IN THE MICROWAVE HEATING OF FOODS AND OTHER MATERIALS

Abstract: A method and device for enhancing the heating of a surface layer of an article being heated by microwave energy is characterized by directing the energy through the surface layer into a main portion of the article in such a manner that the modes of the energy are in cut-off in the surface layer.

Classifications:

International (IPC 8-9): A47J27/00 B65D81/34 H05B6/64 H05B6/74 H05B6/80 (Advanced/Invention); H05B6/74 (Advanced/Non-invention); B65D81/34 H05B6/74 (Core/Invention)

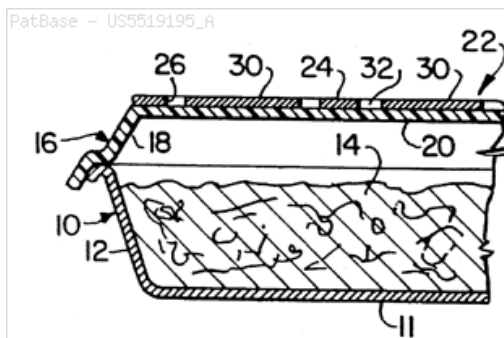
International (IPC 1-7): A47J27/00 B65D81/34 H05B6/64 H05B6/74 H05B6/80

CPC: B65D81/3453 B65D2581/3441 B65D2581/3487

B65D2581/3489 Y10S99/14

European: B65D81/34M1 L65D581/34M3A1 L65D581/34M7A L65D581/34M7R

US: 219/725 219/728 219/730 426/107 426/113 426/234 426/243 99/DIG.14



Family:

Publication number	Publication date	Application number	Application date
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AU199049171 A1	19900816	AU19900049171	19900208
AU628918 B2	19920924	AU19900049171	19900208
BRPI9000574 A	19910115	BR1990PI00574	19900208
CA1339540 A1	19971111	CA19890590564	19890209
DE69014331 D1	19950112	DE19906014331	19900131
DE69014331 T2	19950427	DE19906014331T	19900131
EP0382399 A2	19900816	EP19900300997	19900131
EP0382399 A3	19920212	EP19900300997	19900131
EP0382399 B1	19941130	EP19900300997	19900131
FI900648 A0	19900209	FI19900000648	19900209
JP2270294 A2	19901105	JP19900031351	19900209
JP3049071 B2	20000605	JP19900031351	19900209
NO900546 A	19900810	NO19900000546	19900205
NO900546 A0	19900205	NO19900000546	19900205
US5519195 A	19960521	US19930015311	19930209
ZA9000446 A	19901031	ZA19900000446	19900122

Priority:

CA19890590564 19890209 US19890321758 19890310 ZA19900000446 19900122
US19900607861 19901101 US19930015311 19930209

Probable Assignee: GRAPHIC PACKAGING INT INC

Assignee(s): (std): BECKETT TECHNOLOGIES CORP ; ALCAN INT LTD

Assignee(s): LACROIX CINDY MARIE ; KEEFER RICHARD M ; MORGAN STANLEY SENIOR FUNDING INC ADMINISTRATIVE AGENT AS ; ALCAN INTERNATIONAL LIMITED ; ALCAN INTERNATIONAL LTD ; ALCAN INTERNATIONAL LTD MONTREAL QUEBEC CA ; ALCAN INTERNATL LTD ; BANK OF AMERICA NA ; BANK OF AMERICA NA ADMINISTRATIVE AGENT AS ; GRAPHIC PACKAGING CORP ; MORGAN STANLEY SENIOR FUNDING INC ; JPMORGAN CHASE BANK AS ADMINISTRATIVE AGENT ; GRAPHIC PACKAGING INT ; GRAPHIC PACKAGING INT INC ; JPMORGAN CHASE BANK ADMINISTRATIVE AGENT AS ; MORGAN STANLEY SENIOR FUNDING INC ADMINISTRATIVE A

Inventor(s): (std): CINDY MARIE LACROIX ; KEEFER RICHARD M ; LACROIX CINDY MARIE ; LACROIX CINDY M ; LACROIX CINDY MARIE ; RICHARD M KEEFER ; RICHIAADO EMU KEEFUAA ; SHINDEI MARI RAKUOWA

Inventor(s): LACROIX CINDY MARIE KINGSTON ONTARIO K7M 6J4 CA ; CINDY MARIE LACROIX

Agent(s): WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD; GOWLING LAFLEUR HENDERSON LLP

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

Title: METHOD FOR PRODUCING A THERMOFORMING TOOL AND THERMOFORMING TOOL MADE FROM SAME PROCEDE DE FABRICATION D'UN MOULE DE FORMAGE A CHAUD ET MOULE FORMAGE A CHAUD AIN

Abstract: Source: EP3211109A1 [DE] Die Erfindung betrifft ein Verfahren zum Herstellen eines Warmformwerkzeugstahles zum Formhaerten oder Presshaerten von haertbaren Stahlblechen oder Stahlblechbauteilen, wobei ein Stahl mit der folgenden Zusammensetzung in Gewichts- percent : C = 0,25 bis 0,30 Si = 0,04 bis 0,20 Mn = 1,2 bis 2,0 Cr = 1,0 bis 2,0 Ni = 0, bis 1,5 Mo = 0,3 bis 0,8 V % 0,2 Al = 0,01 bis 0,03, der Rest bestehend aus Eisen und unvermeidbaren Verunreinigungen erschmolzen wird und anschliessend in einem Pfannenofen sekundaermetallurgisch behandelt wird, wobei eine Vakuumentgasung nachfolgt und hieraus Bloecke gegossen werden, wobei die Bloecke anschliessend warm umgeformt werden, und die umgeformten Formate anschliessend austenitisiert (>Ac 3) und anschliessend abgeschreckt werden, so dass sich ein im Wesentlichen bainitisches Gefuege ergibt und anschliessend angelassen werden, wobei der so erhaltene Werkstoff anschliessend entweder ein zweites Mal waermebehandelt wird, wobei zur Kornfeinung und zur Erzielung einer Kerbschlagzaehigkeit % 20 Joule der Werkstoff erneut austenitisiert wird, gefolgt von einer Abschreckung und einem Anlassen bei 570 degrees centigrade bis 605 degrees centigrade und/oder der Werkstoff auf eine gewuenschte Endabmessung gebracht und anschliessend zumindestens eine Formkontur zum Formen des Bleches oder des Werkstuecks herausgearbeitet und entsprechend oberflaechenbearbeitet wird und auf die so erhaltene werkstueckseitige Flaeche eine Schutzschicht aufgeschweisst wird, die haeter als der Grundwerkstoff ist. **Machine translation:** The invention relates to a method for producing a hot molding tool steel to form hardening or curing of press hardenable steel sheets or steel sheet-metal components, wherein a steel with the following composition in weight percent: c=0.25 to 0.30 Si = 0.04 to 0.20 Mn = 1.2 to 2.0 Cr = 1.0 to 2.0 Ni=0, m0=0.3 to 0.8 V to 1.5% 0.2 Al = 0.01 to 0.03, the rest consisting of iron and unavoidable impurities is melted and subsequently in a ladle furnaces secondary metallurgical, a vacuum degassing follows and poured into blocks, where the blocks are then hot-formed, and the formed subsequently austenitized formats (>Ac 3) and then quenched so that a substantially in the form of an electromotive bainit Gefuege results and then restarted with the resulting material then either heat-treated a second time, wherein the grain refiners, and in order to achieve a notched impact toughness % 20 Joules the material again, followed by a quenching, and a cranking austenitized at 570 degrees centigrade to 605 degrees centigrade and/or the material to a desired shape for forming at least one endabmessung and then contour of the sheet or of the workpiece surface is machined and worked out according to the resulting workpiece side surface, a protective layer is welded, the harder than the base material.

Classifications:

International (IPC 8-9): B22F3/105 B22F7/08 B23K26/32 B23K26/342 B23K35/02 B23K35/30 B29C33/38 B32B15/01 C21D1/18 C22C33/02 C22C38/00 C22C38/02 C22C38/04 C22C38/06 C22C38/08 C22C38/12 C22C38/44 C22C38/46 (Advanced/Invention)
CPC: C22C38/00 B22F3/1055 B22F7/08 B23K26/342 B23K35/0244 B23K35/308 B29C33/38 B32B15/011 C22C33/0285 C22C38/02 C22C38/04 C22C38/06 C22C38/08 C22C38/12 C22C38/44 C22C38/46 C21D1/18 C21D1/673 C21D2211/002 C21D2221/00 B23K26/0006 B22F2005/002 B23K2101/20 B23K2103/04

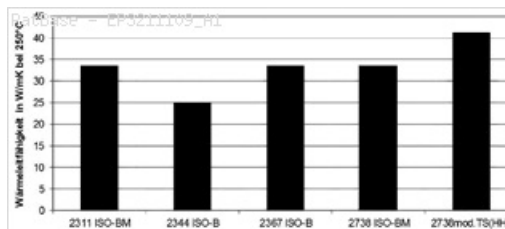


Fig. 1

$$\mu = \frac{F_z}{2F_D}$$

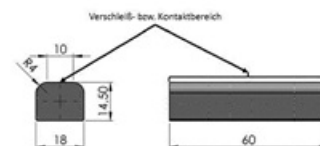


Fig. 2

Family:

Publication number	Publication date	Application number	Application date
DE102016103283 A1	20170824	DE201610103283	20160224
EP3211109 A1	20170830	EP20170157003	20170220

Priority:

DE201610103283 20160224

Probable Assignee: EIFELER LASERTECHNIK GMBH

Assignee(s): (std): BUDERUS EDELSTAHL GMBH ; EIFELER LASERTECHNIK GMBH

Inventor(s): (std): VETTER PETER

Agent(s): PATRONUS IP PATENT U RECHTSANWAELTE

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 ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Title: Improvements in or relating to the melting of glass batch

Abstract: 895,292. Glass-melting furnaces. PILKING- TON BROS. Ltd., JACK, H. R. S., JACQUEST, J. A. T., and ROTHWELL, G. Aug. 29, 1958 [Sept. 10, 1957], No. 28578/57. Class 51 (2). [Also in Group XXIII] In a vertical cylindrical furnace 1 for melting glass, the raw material is delivered tangentially suspended in an air/gas mixture through one or more burners 21 into a widened upper furnace section 4, and flung by the whirling, burning gases on to the furnace walls, from which the molten glass flows out through an outlet 8 into a crucible 25. Each burner has a material supply hopper 17 with stirrer 18 feeding a Venturi mixing chamber supplied with air through pipe 20, the fuel gas being supplied through pipe 22. Additional inlets 30 arranged alternately with the burners supply raw material carried by streams of air. The furnace may be lined with sillimanite 6. In a modification, Fig. 3 (not shown), the outlet 8 is restricted forming a pool of glass which is heated additionally by electrodes extending through the furnace walls.

Classifications:

International (IPC 8-9): C03B3/00 C03B5/12

C03B5/225 (Advanced/Invention);

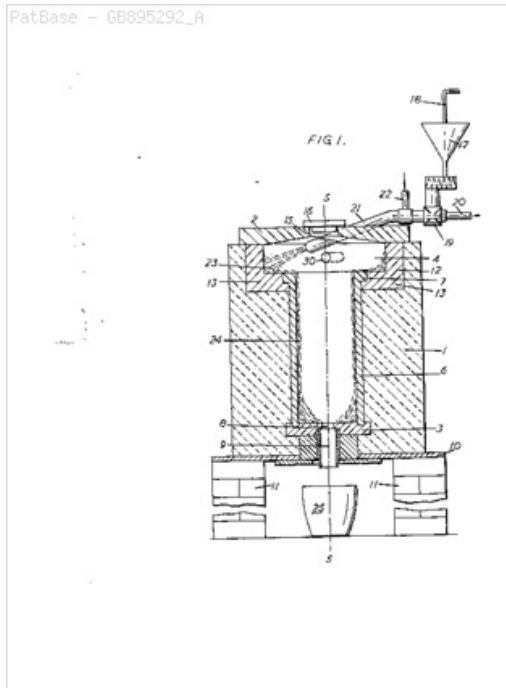
C03B3/00 C03B5/00 (Core/Invention)

International (IPC 1-7): C03B5/12

CPC: C03B3/00 C03B5/12 C03B5/225

European: C03B3/00 C03B5/12 C03B5/225

PatBase - GB895292_A



Family:

Publication number	Publication date	Application number	Application date
BE571066 A	19590309		00000000
DE1219636 A	00000000		00000000
DE1219636 B	19660623	DE1958P021329	19580909
GB895292 A	19620502	GB19570028578	19570910

Priority:

GB19570028578 19570910

Probable Assignee: PILKINGTON BROTHERS LTD

Assignee(s): (std): GEORGE ROTHWELL ; HARRY ROSS SCARLETT JACK ; JOHN ALAN THOMAS JACQUEST ; PILKINGTON BROTHERS LTD

Assignee(s): PILKINGTON BROTHERS LIMITED

Title: USED PAPER RECYCLING APPARATUS AND ITS CONSTITUTENT DEVICES

Abstract: A used paper recycling apparatus being installed in a room of a small shop or the like, friendly to the environment, low in running cost, and capable of maintaining a high confidentiality. The apparatus includes, in an apparatus case of furniture size, a pulp making section for manufacturing used paper pulp by macerating and mashing used paper, a paper making section for manufacturing recycled paper by making the used paper pulp manufactured in the pulp making section, and a control section for driving and controlling the pulp making section and paper making section, in which the pulp making section comprises a macerating unit for macerating the used paper by agitating and tearing, and a mashing unit for mashing the used paper macerated in the macerating unit, and the mashing machine of the mashing unit has mashing members rotating relatively being disposed oppositely across a slight mashing clearance, and the opposing faces of these mashing members cooperate to **form** a mashing action surface, and the used paper passing the mashing clearance is pressurized and mashed by the mashing action surface, and the inks **forming** characters and patterns on the used paper are pulverized.

Classifications:

International (ipc 8-9): D21B1/08 D21B1/14 D21B1/32 D21B1/34 D21C5/02 D21D1/20 D21D1/30 D21F1/00 D21F1/06 D21F1/10 D21F1/56 D21F11/02 D21F3/00 D21F3/08 D21F5/00 D21F5/18 D21F7/08 D21F9/00 D21F9/02 D21G1/02 D21G3/04

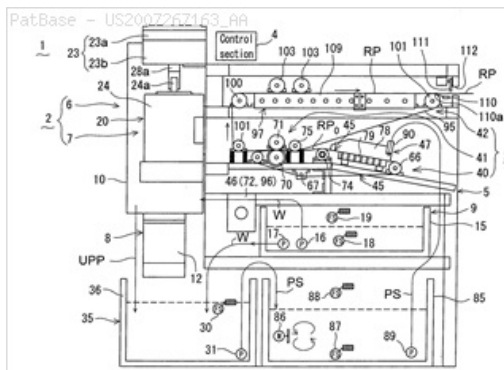
D21H17/01 (Advanced/Invention);
D21B1/08 D21C5/02 D21H17/01 (Advanced/Non-invention);
D21B1/00 D21C5/02 D21F1/00 D21F1/06 D21F1/10 D21F3/00 D21F5/00 D21F9/00 D21H17/00 (Core/Invention)

International (ipc 1-7): D21B1/32 D21C5/02

CPC: Y02W30/646 Y02W30/648 D21B1/32 D21C9/18 D21F9/00 D21H11/14 D21C5/02

European: D21B1/32 D21C5/02 D21F9/00 N21C9/18 N21H11/14

US: 162/252 162/252S 162/261 162/264 162/264S 162/8

**Family:**

Publication number	Publication date	Application number	Application date
CA2586770 AA	20071119	CA20072586770	20070430
CN101074545 A	20071121	CN200710105010	20070518
CN101074545 B	20120328	CN200710105010	20070518
DE602007024151 D1	20120920	DE200760024151T	20070518
DE602007031334 D1	20130822	DE200760031334T	20070518
DE602007034604 D1	20140220	DE200760034604T	20070518
DE602007037837 D1	20140904	DE200760037837T	20070518
EP1862586 A1	20071205	EP20070252054	20070518
EP1862586 B1	20120725	EP20070252054	20070518
EP2275600 A2	20110119	EP20100075645	20070518
EP2275600 A3	20120411	EP20100075645	20070518
EP2275600 B1	20140101	EP20100075645	20070518
EP2281941 A2	20110209	EP20100075673	20070518
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EP2281941 B1	20130626	EP20100075673	20070518
EP2290157 A2	20110302	EP20100075667	20070518
EP2290157 A3	20120425	EP20100075667	20070518
EP2290158 A2	20110302	EP20100075674	20070518
EP2290158 A3	20120502	EP20100075674	20070518
EP2290158 B1	20140723	EP20100075674	20070518
ES2390907 T3	20121119	ES20070252054T	20070518
IN01026DE2007 A	20071123	IN2007DE01026	20070511
JP2007308837 A2	20071129	JP20060140275	20060519
JP2012021257 A2	20120202	JP20110238084	20111030
JP2013091888 A2	20130516	JP20130028487	20130216
JP5207504 B2	20130612	JP20060140275	20060519
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KR101402095 B1	20140530	KR20070048914	20070518
KR20070112074 A	20071122	KR20070048914	20070518
MY165389 A	20180321	MY20070000723	20070510
RU2007118452 A	20081127	RU20070118452	20070517
RU2415219 C2	20110327	RU20070118452	20070517
TH90458 A	20080710	TH20071002469	20070517
TW200801281 A	20080101	TW20070115031	20070427
TWI403630 B	20130801	TW20070115031	20070427
US2007267163 AA	20071122	US20070798104	20070510
US8449722 BB	20130528	US20070798104	20070510

Priority:

JP20060140275	20060519	JP20110238084	20060519	CA20072586770	20070430
EP20070252054	20070518	EP20100075645	20070518	EP20100075674	20070518
EP20100075673	20070518	JP20110238084	20111030	JP20130028487	20130216

Probable Assignee: SEED CO LTD

Assignee(s): (std): KOYAMA YUJI ; SEED CO LTD ; SEED COMPANY LTD ; SID KO LTD ; SEED RUBBER CO LTD ; TAMAI SHIGERU

Assignee(s): SEED KK ; SID KO ; SEED COMPANY LIMITED ; SEED CO

Inventor(s): (std): SHIGERU TAMAI ; TAMAI SHIGERU ; YUJI KOYAMA ; YUJI TAMAI SHIGERU KOYAMA ; KOYAMA YUJI ; TAMAI SIGERU ; KOJAMA JUDZI

Inventor(s): KOYAMA YUJI 3 5 25 ; TAMAI SHIGERU KOYAMA YUJI
Agent(s): MARKS AND CLERK; MARKS AND CLERK LUXEMBOURG LLP; MOUNTENEY SIMON JAMES; WHITE
DUNCAN ROHAN; RADER FISHMAN AND GRAUER PLLC; CHENG LAW GROUP PLLC
Designated states: AL BA DE ES FR GB HR IT MK YU

Title: WELDING ROD AND ELECTRODE

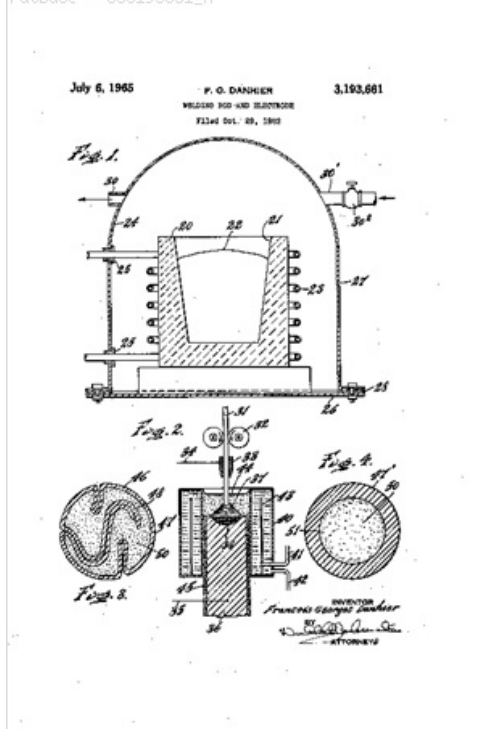
Abstract: A ductile wrought cobalt base alloy, e.g. as strip, sheet or tubular wire for **forming** the envelope of welding rods or electrodes (see Division B3), is produced by melting raw granular cobalt, e.g. containing 1 percent Ni and 0.4 percent other impurities including 0.002 percent S with As, C and Cu, while protecting it from the atmosphere by a protective environment, e.g. an inert gas, vacuum or slag covering, alloying with the cobalt an ingredient having an iron equivalent $(Fe)=Fe+1/4.Mn$ where Mn is 0.5-3 percent and (Fe) is 2-10 percent by weight of the alloy, the alloying ingredient optionally containing by weight of the alloy up to 0.1 percent Mg, 0.8 percent Ti, 0.1 percent C, the balance being Co and incidental impurities, solidifying the alloy thus produced while protecting it by the protective environment, and **hot** working the ingot produced with or without further cold working. For example, the ingot may be soaked at 1200 DEG C., **hot** rolled until **temperature** reaches 900 DEG C. with annealing at 750 DEG C. in argon, and prior to cold working, with annealing at 680 DEG C.; scale may be removed by sand blasting or pickling. The ingot may be produced in an induction furnace comprising a magnesia crucible and a water-cooled inductor under a gas-tight envelope supplied with argon, or in a **Joule** effect submerged arc melting process, wherein an electrode of powdered cobalt and alloying constituents together with flux is advanced through a contact device which melts the mixture, the progressively solidified alloy being withdrawn. The core of the welding rod or electrode made from the alloy of the invention may be composed of a powder mixture of Cr, W and C (mainly graphite) so as to make a total electrode composition of: - 2.87-3.25 percent Fe, 1.44-1.62 percent Mn, 0.057-0.65 percent Mg, 1.085-3.244 percent C, 53.07-59.99 percent Co, 21.56-28.70 percent Cr, 5.25-15.39 percent W.

Classifications:**International (IPC 8-9):** B23K35/02 B23K35/04 B23K35/30 C22C19/07 (Advanced/Invention);

B23K35/02 B23K35/30 C22C19/07 (Core/Invention)

International (IPC 1-7): B23K35/04 B23K35/30 H05B7/08**CPC:** B23K35/0266 B23K35/3046 C22C19/07**European:** B23K35/02E2B B23K35/30G C22C19/07**US:** 219/146.51

PatBase - US3193661_A

**Family:**

Publication number	Publication date	Application number	Application date
BE616832 A	00000000		00000000
FR1327311 A	19630517	FR19620895510	19620425
GB990039 A	19650422	GB19620014786	19620417
US3193661 A	19650706	US19620233823	19621029

Priority:

US19610105719 19610426 FR19620895510 19620425 US19620233823 19621029

Probable Assignee: SOUDURE ELECTR AUTOGENE SA**Assignee(s):** (std): SOUDURE ELECTR AUTOGENE ; SOUDURE ELECTR AUTOGENE S A ; SOUDURE AUTOGENE ELECT ; SOUDURE ELECTR AUTOGENE SA**Assignee(s):** LA SOUDURE ELECTRIQUE AUTOGENE SA ; GRUMMAN ALLIED IND ; GRUMMAN ALLIED IND INC 4170 VETERANS MEMORIAL HIGHWAY BOHEMIA NY A CORP OF NY ; LA SOUDURE ELECTRIQUE AUTOGENE PROCEDES ARCOS ; LA SOUDURE ELECTRIQUE AUTOGENE S A**Inventor(s):** (std): GEORGES DANHIER FRANCOIS**Inventor(s):** DANHIER FRANCOIS GEORGES