

FRFULL (FRench Patents FULL Text) covers the full text of all patent applications published in France. Text for French Applications has been created by Optical Character Recognition (OCR) software. Therefore, characters may be misinterpreted, or portions of the text may be incomplete. A small percentage of records are absent because they failed to scan.

Records of the database contain bibliographic data, titles in English and French, and full text of description and claims. Abstracts in English and French are available from 1996 onwards. Clipped images - mostly front-page images - are included, when available.

An online thesaurus is available in the /IPC field.

## **SUBJECT COVERAGE**

- All patent-relevant areas of science and technology are included.

## **SOURCES**

- French Patents Full Text Documents

## **FILE DATA**

- 1980 to present (03/08): more than 468,900 records, more than 210,000 images
- Updated weekly
- Automatic current-awareness searches (SDIs) may be run weekly or monthly (weekly is the default)

## **PRODUCER**

Univentio International  
Holding B.V.  
De Roysloot 9a  
2231 NZ Rijnsburg  
The Netherlands  
Phone: +31 71 402 82 62  
Fax: +31 71 403 53 20  
E-mail: info@univentio.com  
Copyright Holder

## **SUPPLIER**

FIZ Karlsruhe  
P.O. Box 2465  
76012 Karlsruhe  
Germany  
Phone: +49 7247 808-555  
Fax: +49 7247 808-259  
E-mail: helpdesk@fiz-karlsruhe.de

## **USER AIDS**

- Online Helps (HELP DIRECTORY lists all help messages available)
- STNGUIDE

## SEARCH AND DISPLAY FIELDS

Search Field Name	Search Code	Search Examples	Display Code
Basic Index (contains single words from the titles (TIEN, TIFR), abstracts (ABEN, ABFR), detailed description (DETD), claims (CLM), and main claims (MCLM) fields 1)	None or /BI	S TRANSISTOR AND ELECTRODE S SENSOR FOR DETERMINER S TRAITEMENT? ULTERIEUR S ?TRANSFER?	TIEN, TIFR, ABEN, ABFR, DETD, CLM, MCLM
Abstract (in English and French)	/AB	S PARAMETERS OF REGULATION/AB S PROCEDE SELON/AB	ABEN, ABFR
Application Country (WIPO code and text)	/AC	S FR/AC	AI
Application Date 2)	/AD	S AD=JAN 2003	AI
Accession Number	/AN	S 2427770/AN	AN
Application Number 3)	/AP (/APPS)	S FR2000-10010/AP S 2000FR-0010010/APPS	AI
Application Year 2)	/AY	S AY>=2000	AI
Claims	/CLM	S DERIVATION/CLM	CLM
Number of Claims 2)	/CLMN	S 5-7/CLMN	CLMN
Number of Paragraphs in DETD (Detailed Description) 2)	/DETN	S DETN<10	DETN
Document Type (code and text)	/DT (/TC)	S U/DT S UTILITY MODEL/DT	DT
Entry Date 2)	/ED	S ED=MAR 2004	ED
Entry Week 2)	/EW	S EW>200800	EW
Field Availability	/FA	S ABEN/FA	FA
Graphic Image Size 2)	/GIS	S 200-300/GIS	GIS
International Patent Classification (ICM, ICS)	/IC	S A24B/IC	IC
IPC, Main	/ICM	S A01N001/ICM	ICM
IPC, Secondary	/ICS	S A01B001-16/ICS	ICS
Inventor (current and old) 4)	/IN (/AU)	S DANIEL MANAUT/IN S MANCEAUX?/IN	IN
International Patent Classification (ICM, ICS, IPCI, IPCR) 5)	/IPC	S C09K-007-02/IPC	ICM, ICS, IPCI, IPCR
IPC, Action Date	/IPC.ACD	S 20051008/IPC.ACD	IPC.TAB
IPC, Keyword Terms	/IPC.KW	S INITIAL/IPC.KW	IPC.TAB
IPC, Version	/IPC.VER	S 7/IPC.VER	IPC.TAB
Language (code and text)	/LA	S FR/LA S FRENCH/LA	LA
Language, Filing (code and text)	/LAF	S EN/LAF S ENGLISH/LAF	LAF
IPC Main Group (range searchable) (version 1-7) 2)	/MGR	S 10-20/MGR(S)C07C/IC	ICM, ICS
Patent Applicant/Patentee 4)	/PA (/CS)	S BASF AG/PA	PA
Patent Applicant/Patentee Country (WIPO code and text)	/PA.CNY	S DE/PA.CNY	
Patent Country (WIPO code and text)	/PC	S FRANCE/PC	PI
Publication Date 2)	/PD	S PD=JAN-FEB 2003	PI
Patent Information Publication Type	/PIT	S FRA1 APPLICATION, FIRST APPLICATION/PIT	PIT
Patent Kind Code	/PK	S FRA2/PK	PI
Patent Number 3)	/PN (/PATS)	S FR247765/PN	PI

- 1) In addition to right truncation, simultaneous left and right truncation are available in this field. At least 4 characters need to be used for the length of the stem.
- 2) Numeric search field that may be searched using numeric operators or ranges.
- 3) Either STN format or Derwent format may be used.
- 4) Search with implied (S) proximity is available in this field.
- 5) An online thesaurus is available in this field.

## SEARCH AND DISPLAY FIELDS (continued)

Search Field Name	Search Code	Search Examples	Display Code
Priority Country (WIPO code and text)	/PRC	S AU/PRC S AUSTRALIA/PRC	PRAI
Priority Date	2) /PRD	S PRD=APRIL, 2 2003	PRAI
Priority Kind Code	/PRK	S DEA/PRK	PRAI
Priority Number	3) /PRN	S DE2000-10023591/PRN	PRAI
Priority Type	/PRT	S NATIONAL APPLICATION/PRT	Not displayed
Priority Year	2) /PRY	S 1993/PRY	PRAI
Priority Year, First	2) /PRYF	S 1993-1994/PRYF	
Publication Year	2) /PY	S PY>2003 AND L1	PI
IPC Subgroup Range-Searchable Version 1-7	2) /SGR	S C01B/ICM(S)100-2000/SGR	IC
Title	/TI	S FLUID###/TI	TIEN, TIFR
Update Date	2) /UP	UP=APR 2004	UP
Update Week	2) /UW	S UW>200400	UW

2) Numeric search field that may be searched using numeric operators or ranges.

3) Either STN format or Derwent format may be used.

## IPC Thesaurus

The classifications, validity and catchwords for the main headings and subheadings from the current (8th) edition of the WIPO International Patent Classification (IPC) manual are available. The classifications from the previous editions (1-7) are also available as separate thesauri. To EXPAND and SEARCH in the thesauri for editions 1-7, use the field code followed by the edition number, e.g., /IPC2, for the 2nd edition. Catchwords are included only in the thesauri for the 8th, 7th, 6th, and 5th editions.

Relationship-Code	Content	Examples
ADVANCED (ADV)	Advanced Codes for the Core Level IPC Code	E A61K0006-02+ADVANCED/IPC
ALL	All Associated Terms (BT, SELF, NT, RT)	E C01C003-00+ALL/IPC
BRO (MAN)	Complete Class	E C01C+BRO/IPC
BT	Broader Term (BT, SELF)	E C01F001-00+BT/IPC
CORE (COR)	Core Codes for the Advanced Level IPC Code	E G08C0019-22+CORE/IPC
ED	Complete title of the SELF term and IPC manual edition	E C01F001-00+ED/IPC
HIE	Hierarchy Term (Broader and Narrower Term) (BT, SELF, NT)	E C011003-00+HIE/IPC
INDEX	Complete title of the SELF term	E C01F001-00+INDEX/IPC
KT	Keyword Term (catchwords) (SELF, KT)	E CYANOGEN+KT/IPC
NEXT	Next Classification	E C01C001-00+NEXT5/IPC
NT	Narrower Terms (SELF, NT)	E C01C+NT/IPC
PREV	Previous Classification	E C01C001-12+PREV10/IPC
RT (SIB)	Related Terms (SELF, RT)	E C01C003-20+RT/IPC
TI	Complete Title of the SELF Term and Broader Terms (BT, SELF)	E C01F001-00+TI/IPC

## DISPLAY AND PRINT FORMATS

Any combination of display fields and formats may be used to display or print answers. Multiple codes must be separated by commas or spaces, e.g. 'D L1 1-5 TI PI'. The fields are displayed or printed in the order requested. Hit-term highlighting is available for most searchable fields. Highlighting must be ON during SEARCH in order to use the HIT, KWIC, and OCC formats.

More information about display fields for specific types of information is available by typing one of the following 'HELP' commands at an arrow prompt (=>) in the FRFULL database:

## DISPLAY AND PRINT FORMATS (continued)

HELP DFIELDS	-	lists all valid custom formats
HELP EFIELDS	-	lists all selectable fields
HELP FORMATS	-	lists valid predefined formats
HELP SRTFIELDS	-	lists valid sort fields

Format	Definition	Examples
AB	Abstract	D TI AB 1-5
ABEN	Abstract in English	
ABFR	Abstract in French	
AI (AP)	1) Application Information	D AI
AN	Accession Number	D L3 AN
APPS	Application Number Group	
CLM	Claims	
CLMN	Number of Claims	D CLMN
DETD	Detailed Description	D DETD
DETN	Number of Paragraphs in DETD	D DETN
DT (TC)	Document Type	D DT LA
ED	Entry Date	D ED
EW	Entry Week	D EW
FA	Field Availability	D FA
GI	2) Graphic Image	D GI
GIS	3) Graphic Image Size	D GIS
IC	IPC (format contains ICM, ICS)	D IC
ICM	IPC, Main	D ICM
ICS	IPC, Secondary	D ICD
IN (AU)	Inventor	D IN
IPC	International Patent Classification (ICM, ICS, IPCI, IPCR)	
IPCI	IPC, Initial	D IPCI
IPCR	IPC, Reclassified	D IPCR
LA	Language	D LA
LAF	Language of Filing	
LS	3) Legal Status (from the INPADOCDB database)	D LS
LS2	3) Legal Status (from the INPADOCDB database), detailed version with display headers	
MCLM	Main Claim	D MCLM
PA (CS)	Patent Applicant/Patentee	D PA
PA.CNY	Patent Applicant/Patentee Country	
PATS	Patent Number Group	D PATS
PI (PN)	1) Patent Information	D PI
PIT	Patent Information Publication Type	
PRAI (PRN)	1) Priority Information	D PRAI
PY	Publication Year	
TI	Title	D TI
TIEN	Title in English	D TIEN 1-3
TIFR	Title in French	
UP	Update Date	
UW	Update Week	
ABS ALL (MAX)	AN, AB (ABEN, ABFR), MCLM AN, ED, EW, UP, TI (TIEN, TIFR), IN, PA, PA.C, LA, LAF, DT, PIT, PI, AI, PRAI, IPC, AB (ABEN, ABFR), DETD, CLM, FA (from all documents of a record)	D ABS

- 1) Application and patent numbers are available in Derwent and STN format. The format for DISPLAY, PRINT, SELECT and SORT is set using the SET PATENT command. STN is the default format. Enter SET PAT DERWENT to change to the DERWENT format. To reset to the STN format, enter SET PAT STN.
- 2) Any program that handles TIFF and JPeg images compressed in Group 4 fax format, e.g., STN Express, may be used to capture graphic images from DISPLAY or they may be viewed directly on the screen during a STN on the WEB session.
- 3) Custom display only.

**DISPLAY AND PRINT FORMATS (continued)**

Format	Definition	Examples
ALLG (MAXG) 1,2)	ALL, plus Graphic Image	
APPS 1)	AI, PRAI	
BIB 1)	AN, ED, TI (TIEN, TIFR), IN, PA, LA, LAF, DT, PIT, PI, AI, PRAI	D BIB
IBIB 1)	BIB, indented with text labels	D IBIB
BRIEF 1)	AN, ED, EW, TI (TIEN, TIFR), IN, PA, LAF, DT, PIT, PI, AI, PRAI, IPC, AB (ABEN, ABFR), MCLM	D BRIEF
BRIEFG 1,2)	BRIEF, plus Graphic Image	
IBRIEF 1)	BRIEF, indented with text labels	D IBRIEF
IALL (IMAX) 1)	ALL, indented with text labels	D IALL
IALLFR (IMAXFR) 1)	ALL, Indented with text labels, with French terminology	
IALLG (IMAXG) 1,2)	IALL, plus Graphic Image	
FAM	AN, table of patent family information (from the INPADOCDB database)	
CFAM	Condensed family format (from the INPADOCDB database)	
IND	IPC (ICM, ICS, IPCI, IPCR)	
IPC.TAB	IPC, IPC.KW, IPC.ACD, IPC.VER, in tabular version	
SCAN 4)	TI (TIEN, TIFR) (random display without answer numbers)	D SCAN
STD 1)	AN, ED, TI (TIEN, TIFR), IN, PA, LA, LAF, DT, PIT, PI, AI, PRAI, IPC (only the latest published document of a record)	
STDG 1,2)	STD plus Graphic Image	
ISTD 1)	STD, indented with text labels	
ISTDG 1,2)	ISTD, plus Graphic Image	
TRIAL (TRI, SAMPLE, SAM, FREE)	TI, FA, DETN, CLMN	
TX	DETD, CLM	D TX
HIT	Hit-term(s) and field(s)	
KWIC	Up to 50 words before and after hit-term(s) (KeyWord-In-Context)	
OCC	Number of occurrences of hit-term(s) and field(s) in which they occur	D OCC 1-6

- 1) Application and patent numbers are available in Derwent and STN format. The format for DISPLAY, PRINT, SELECT and SORT is set using the SET PATENT command. STN is the default format. Enter SET PAT DERWENT to change to the DERWENT format. To reset to the STN format, enter SET PAT STN.
- 2) Any program that handles TIFF and JPeg images compressed in Group 4 fax format, e.g., STN Express, may be used to capture graphic images from DISPLAY or they may be viewed directly on the screen during a STN on the WEB session.
- 4) SCAN must be specified on the command line, i.e., D SCAN or DISPLAY SCAN.

**SELECT, ANALYZE, AND SORT CODES**

The SELECT command is used to create E-numbered or L-numbered lists of terms taken from the specified field(s) in an answer set.

The ANALYZE command is used to create an L-number containing terms taken from the specified field in an answer set.

The SORT command is used to rearrange the search results in either alphanumeric (A) or numeric (N) order of the specified field(s).

Definition	Code	Analyze/ Select 1)	Sort
Abstract	AB	x	-
Abstract in English	ABEN	x 2)	-
Abstract in French	ABFR	x 2)	-
Application Country	AC	x	-
Application Date	AD	x	-
Application Information	AI (AP, APPS)	x 3)	-
Accession Number	AN	x	A

- 1) HIT may be used to restrict terms extracted to terms that match the search expression used to create the answer set, e.g., SEL HIT TI.
- 2) Appends /AB to the terms created by SELECT.
- 3) Selects or analyzes application numbers with /AP appended to the terms created by SELECT.

**SELECT, ANALYZE, AND SORT CODES (continued)**

Definition	Code	Analyze/ Select 1)	Sort
Application Year	AY	x	-
Claims	CLM	x	-
Number of Claims	CLMN	x	-
Detailed Description	DETD	x 4)	-
Number of Paragraphs in DETD	DETN	x	-
Designated State	DS	x	-
Document Type	DT (TC)	x	A
Entry Date	ED	x	N
Entry Week	EW	x	N
Field Availability	FA	x	-
Graphic Image Size	GIS	x	N
International Patent Classification	IC	x	-
IPC, Main	ICM	x	A
IPC, Secondary	ICS	x	A
Inventor	IN (AU)	x	A
IPC (ICM, ICS, ICA, ICI, IPCI, IPCR)	IPC	x	-
IPC, Advanced Level Symbols	IPC.A	x 5)	-
IPC, Advanced Level Symbols for Invention	IPC.AI	x 5)	-
IPC, Core Level Symbols	IPC.C	x 5)	-
IPC, Core Level Symbols for Invention	IPC.CI	x 5)	-
Pre-IPC8 Symbols from the ICM and first IPC8 values from 2006 onwards	IPC.F	x 5)	-
IPC, Initial	IPCI	X 5)	-
IPC, Reclassified	IPCR	X 5)	-
Language	LA	x	A
Language of Filing	LAF	x	A
Main Claim	MCLM	x	-
Occurrence Count of Hit Terms	OCC	-	N
Patent Assignee	PA (CS)	x	A
Patent Applicant/Patentee Country	PA.CNY	x	A
Patent Number Group	PATS	x	-
Patent Country	PC	x	A
Publication Date	PD	x	N
Patent Information	PI (PN)	x 6)	A
Patent Information Publication Type	PIT	x	A
Patent Kind Code	PK	x	A
Priority Information	PRAI (PRN)	x 7)	A
Patent Number	PN	x	A
Priority Information, Original	PRAI	x	A
Priority Country	PRC	x	A
Priority Date	PRD	x	N
Priority Number	PRN	x	A
Priority Number, Original	PRNO	x	A
Priority Year	PRY	x	N
Priority Year, First	PRYF	x	N
Publication Year	PY	x	N
Subclass Group	SCG	x	-
Subclass Group Main	SCGM	x	-
Subclass	SCL	x	-
Subclass Main	SCLM	x	-
Title	TI	x (default)	A

1) HIT may be used to restrict terms extracted to terms that match the search expression used to create the answer set, e.g., SEL HIT TI.

2) Appends /AB to the terms created by SELECT.

4) Appends /BI to the terms created by SELECT.

5) Appends /IPC to the terms created by SELECT.

6) Selects or analyzes patent numbers with /PN appended to the terms created by SELECT.

7) Selects or analyzes priority numbers with /PRN appended to the terms created by SELECT.

## SELECT, ANALYZE, AND SORT CODES (continued)

Definition	Code	Analyze/ Select 1)	Sort
Title in English	TIEN	x 8)	A
Title in French	TIFR	x 8)	A
Update Date	UP	x	N
Update Week	UW	x	N

- 1) HIT may be used to restrict terms extracted to terms that match the search expression used to create the answer set, e.g., SEL HIT TI.  
8) Appends /TI to the terms created by SELECT.

## SAMPLE RECORDS

## DISPLAY ALL

AN 2817396 FRFULL ED 20040212  
 TIEN PROCEDE OF MANUFACTURE FOR MULTI-LAYER SUBSTRATE HIGH DENSITY  
 TIFR PROCEDE DE FABRICATION POUR SUBSTRAT MULTICOUCHE HAUTE DENSITE  
 IN HUANG NING; SHIEH WEN LO; CHUANG YUNG CHENG; CHEN HUI PIN; CHIANG HUA  
 WEN; CHANG CHUNG MING; TU FENG CHANG; HUANG FU YU; CHANG HSUAN JUI; HU  
 CHIA CHIEH  
 PA ORIENT SEMICONDUCTOR ELECTRONICS LTD  
 PA.CNY TW  
 LAF French  
 LA French  
 DT Patent  
 PIT FRA1 Application, first publication  
 PI FR 2817396 A1 20020531  
 AI FR 2001-4682 A 20010406  
 PRAI TW 2000-125424 A 20001127  
 ICM H01L021-48  
 ICS H01L023-14  
 ABEN The present invention relates to overall a multi-layer manufacturing  
 process of substrate high density, and in particular, a process  
 employing a layer of polyimide, or another material in the form of  
 polymeric film high density, to form a polyimide substrate, or polymeric  
 film substrate high density, to form a first sleeps (11) of a  
 multi-layer chart.  
 ABFR La presente invention concerne globalement un procede de fabrication de  
 substrat multicouche haute densite, et en particulier, un procede  
 employant une couche de polyimide, ou autre materiau sous forme de film  
 polymerique haute densite, pour former un substrat de polyimide, ou  
 substrat de film polymerique haute densite, pour former une premiere  
 couche (11) d'une carte multicouche.  
 DETD La presente invention sera mieux comprise a la lecture de la 20  
 description detaillee suivante, faite en reference aux dessins  
 d'accompagnement dans lesquels: la figure 1 est une vue de dessus  
 schematique d'une carte multicouche haute densite conventionnelle; la  
 figure 2 represente la structure d'une carte multicouche 25 haute  
 densite conventionnelle; les figures 3a et 3b sont des vues en coupe  
 illustrant le procede de fabrication d'un mode de realisation prefere du  
 substrat multicouche a haute densite de la presente invention; les  
 figures 4a et 4b montrent un autre mode de realisation 30 prefere de la  
 presente invention.

Sur les figures 3a et 3b est represente un procede de fabrication pour substrat multicouche haute densite employant un substrat de polyimide pour former la premiere couche (ou autre materiau de type film polymerique) en la combinant avec un substrat organique a densite non elevee en tant que deuxieme couche formee a partir d'un materiau organique, comprenant les etapes consistant a: a) former un substrat de polyimide 11 de premiere couche (ou substrat de film polymerique haute densite) de la carte multicouche 1 en employant du polyimide (ou autre film polymerique haute densite) 111, former sur le substrat de polyimide 11 (ou substrat de film polymerique haute densite) une implantation de circuits 112 a pas etroit a l'aide d'un procede de formation de circuits (comme un procede de galvanoplastie), le circuit prefabrique 112 etant dirige vers la face inferieure du substrat de polyimide 11, la densite de circuit etant 10 etendue et diluee de facon appropriee, et la face inferieure etant munie de pastilles de soudure 113 en des positions appropriees; b) former un substrat organique a densite non elevee de deuxieme couche en utilisant un materiau organique 12, et les deux cotes d'un substrat central 122 etant munis d'une couche de conduction 15 123 pour disposer un circuit 1231 et une couche d'isolation 124 et la face superieure du circuit 1231 et la face inferieure du substrat de polyimide 11 de couche superieure (ou substrat de film de couche polymerique haute densite) etant soudees au moyen d'une bosse de soudure 125, en une position correspondante, a la pastille de soudure 113, le circuit 123 employant un chemin 1221 pour traverser le substrat central 122 jusqu'a la couche de conduction 123 au niveau de la face inferieure du substrat organique 12 a densite non elevee, repartir le circuit 1231 et abaisser la densite de circuit; et c) chauffer et comprimer le substrat de polyimide 11 de 25 premiere couche (ou substrat de film polymerique haute densite) et le substrat organique a densite non elevee 12 de deuxieme couche apres alignement, et la bosse de soudure 124 de la surface du substrat organique a densite non elevee 12 de deuxieme couche et la face inferieure du premier substrat en polyimide 11 (ou substrat de film polymerique haute densite) etant soudees ensemble pour etre reliees electriquement. Comme montre sur les figures 4a et 4b, le substrat central, la couche de conduction, la couche d'isolation sont liees ensemble en sequence pour former de maniere repetee une ou plusieurs multicouches et pour abaisser la densite de circuit de la premiere couche.

CLM 1. Procede de fabrication pour substrat multicouche haute densite employant un substrat de polyimide pour former une premiere couche en la combinant avec un substrat organique a densite non elevee en tant que deuxieme couche, caracterise en ce qu'il comprend les 5 etapes consistant a: a) former un substrat de polyimide (11) de premiere couche d'une carte multicouche (1) en employant du polyimide, ou autre film polymerique haute densite (111), former sur le substrat de polyimide (11) une implantation de circuits (112) a pas etroit a l'aide d'un procede de formation de circuits, le circuit prefabrique (112) etant dirige vers la face inferieure du substrat de polyimide (11), la densite de circuit etant etendue et diluee de facon appropriee, et la face inferieure etant munie de pastilles de soudure (113) en des positions appropriees; b) former un substrat organique a densite non elevee de deuxieme couche en utilisant un materiau organique (12), et les deux cotes d'un substrat central (122) etant munis d'une couche de conduction (123) pour disposer un circuit (1231) et une couche d'isolation (124) et la face superieure du circuit (1231) et la face inferieure du substrat de polyimide (11) de couche superieure etant soudees au moyen d'une bosse de soudure (125) en une position correspondante, le circuit employant un chemin (1221) pour traverser le substrat central (122) jusqu'a la couche de conduction (123) au niveau de la face inferieure du substrat organique (12) a densite non elevee, repartir le circuit (1231) et abaisser la densite de circuit; et c) chauffer et comprimer le substrat de polyimide (11) de premiere couche et le substrat organique a densite non elevee (12) de deuxieme couche apres alignement, et la bosse de soudure (124) de la surface du substrat organique a densite non elevee (12) de deuxieme couche et la face inferieure du premier substrat

en polyimide (11) etant soudees ensemble pour etre reliees electriquement.

2. Procede de fabrication selon la revendication 1, caracterise en ce que le substrat organique a densite non elevee (12) de deuxieme couche comprend le substrat central, la couche de conduction, la couche d'isolation en sequence pour former de maniere repetee une ou plusieurs multicouches et pour abaisser la densite de circuit de la premiere couche. 1/4 281739612' 11' (TECHNIQUE ANTERIEURE)

**DISPLAY BRIEF**

AN 2885279 FRFULL ED 20061108 EW 200644  
 TIEN OPERATIVE PARAGRAPH OF EXCITATION FOR INDUCTION FURNACE OF PLANE  
 TIFR DISPOSITIF D'EXCITATION POUR FOUR A INDUCTION D'AVION  
 IN SCHULER ANSGAR; BANNWARTH MARKUS; SCHERF MARKO  
 PA HUTTINGER ELEKTRONIL GMBH + CO.KG  
 LAF French  
 LA French  
 DT Patent  
 PIT FRA1 Application, first publication  
 PI FR 2885279 A1 20061103  
 AI FR 2006-3873 A 20060428  
 IPCI H05B0006-08 [I,A]; F24C0007-00 [I,A]; H05B0006-12 [I,A]; A47J0039-02 [I,A]  
 H05B0006-06 [I,C\*]; F24C0007-00 [I,C\*]; H05B0006-12 [I,C\*]; A47J0039-00 [I,C\*]  
 MCLM 1. Dispositif d'excitation pour four a induction d'avion (10), comprenant: a. au moins un raccord pour un reseau de bord, en particulier un reseau de bord polyphase, b. au moins un redresseur de secteur (11, 21, 31) raccordable a une phase (PI-P3) d'un reseau de bord, c. un convertisseur (13, 23, 33) place apres ledit au moins un redresseur de secteur (11, 21, 31), qui comprend un element de commutation (53), d. un controleur PFC (12, 22, 32) qui commande ledit au moins un convertisseur, e. un redresseur (14, 24, 34) place apres le convertisseur (13, 23, 33) pour generer une tension de circuit intermediaire (U4), f. un onduleur (41) raccorde a la tension de circuit 15 intermediaire (U4), caracterise par le fait que l'element de commutation (53) est forme par un element de commutation (53) ayant une resistance a l'etat passant  $R < 0,1 Q$  et une capacite propre (55) de l'element de commutation (53)  $< 200 \text{ pF}$  pour des tensions aux bornes de l'element de commutation (53)  $> 200 \text{ V}$ .

**DISPLAY BIB**

AN 2874172 FRFULL ED 20060503 EW 200608  
 TIEN EASILY TRANSPORTABLE AND ADAPTABLE DEVICE ON A BASIN OF THE SWIMMING POOL TYPE, AND ALLOWING THE PRODUCTION OF JET OF FLUID  
 TIFR DISPOSITIF FACILEMENT TRANSPORTABLE ET ADAPTABLE SUR UN BASSIN DE TYPE PISCINE, ET PERMETTANT LA PRODUCTION DE JET(S) DE FLUIDE(S)  
 PA PILLE NICOLAS; PILLE LAURENT  
 LAF French  
 LA French  
 DT Patent  
 PIT FRA1 Application, first publication  
 PI FR 2874172 A1 20060217  
 AI FR 2004-8848 A 20040812  
 PRAI FR 2004-8848 A 20040812 \*