

<b>Subject Coverage</b>	<ul style="list-style-type: none"> <li>All areas of science and technology, i.e., all classes of the International Patent Classification</li> </ul>	
<b>File Type</b>	Bibliographic	
<b>Features</b>	<p>Thesauri</p> <p><a href="#">Alerts (SDIs)</a></p> <p>CAS Registry Number® Identifiers</p> <p><a href="#">Keep &amp; Share</a></p>	<p>Cooperative Patent Classification (CPC) and International Patent Classification (IPC)</p> <p>Weekly or monthly (Weekly is the default)</p> <p>SLART <input checked="" type="checkbox"/></p> <p>Structures <input type="checkbox"/></p>
<b>Record Content</b>	<ul style="list-style-type: none"> <li>Family data of patent documents, utility models, and design patents of more than 100 patent-issuing organizations including the European Patent Office (EPO) and the World Intellectual Property Organization (WIPO).</li> <li>Legal status data of 98 patent-issuing organizations (54 countries + from 44 countries of the national phases PCT/EP). Two classification systems for over 4,200 legal event codes are available; see HELP LEGSTAT for details.</li> <li>Indexes are based on the patent families, where in INPADOCDB the indexes are based on the patent applications. The accession number AN in INPAFAMDB is the family number FN from INPADOCDB.</li> <li>Abstracts are provided for more than 51 million records with more than 48 million abstracts in English.</li> <li>Patent status indicators are provided for all patent authorities; see HELP STATUS for details.</li> <li>Calculated expiration dates are provided for all patent authorities except WO and ID, see HELP XPD for details.</li> <li>Note: The family number can change due to corrections/updates of patent relevant numbers and codes.</li> </ul>	
<b>File Size</b>	<p>More than 106 million patent family records with about 135 million publications in more than 71 million international patent families from 1782 to the present (12/2021)</p> <p>More than 382 million legal status data in more than 71 million patent families from 1967 to present (12/2021)</p>	
<b>Coverage</b>	1782-present	
<b>Updates</b>	Weekly with 200,000-1,000,000 records and 400,000-1,000,000 legal status data	
<b>Language</b>	English, French, German, Spanish, Portuguese, Chinese, Japanese, Korean, Russian	
<b>Database Producer</b>	<p>European Patent Office Vienna Sub Office P.O. Box 90 Austria Phone: +43 1 52126-0 Fax: +43 1 52126-5491 Email: <a href="mailto:patentdata@epo.org">patentdata@epo.org</a> Copyright Holder</p>	<p>FIZ Karlsruhe STN Europe P.O. Box 2465 76012 Karlsruhe Germany Phone: +49 7247 808-555 Fax: +49 7247 808-259 Email: <a href="mailto:helpdesk@fiz-karlsruhe.de">helpdesk@fiz-karlsruhe.de</a> Copyright Holder</p>

**INPAFAMDB****Database  
Supplier**

FIZ Karlsruhe  
STN Europe  
P.O. Box 2465  
76012 Karlsruhe  
Germany  
Phone: +49 7247 808-555  
Fax: +49 7247 808-259  
Email: [helpdesk@fiz-karlsruhe.de](mailto:helpdesk@fiz-karlsruhe.de)  
Copyright Holder

---

**Sources**

- EPO-Patent Information Resource based on the data supplied by the patent offices (INPADOC/DOCDB Service)
  - INPADOC Legal Status Service
- 

**User Aids**

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

**Cluster**

- ALLBIB
- AUTHORS
- CORPSOURCE
- HPATENTS
- PATENTS

STN Database Cluster information:

<http://www.stn-international.com/en/customersupport/customer-support#cluster+%7C+subjects+%7C+features>

---

## Search and Display Field Codes

Fields that allow left truncation are indicated by an asterisk (\*).

### Bibliographic Search Fields

Search Field Name	Search Code	Search Examples	Display Codes
Basic Index* (contains single words from title (TI) and abstract (AB) fields)	None or /BI	S TUBULAR HEAT EXCHANG? S ALUM? (S) COAT? S ?MAGNET? S ?METHYL?(T)?AMINO?	AB, ABDE, ABFR, ABES, ABOL, ABS, TI
Abstract* (contains ABDE, ABEN, ABES, ABFR, ABOL)	/AB	S (DRILLING(W)PROCESS)/AB	AB, ABDE, ABEN, ABES, ABFR, ABOL, ABO
Abstract (English)	/ABEN	S CATABOLIC/ABEN	ABEN
Abstract (French)	/ABFR	S CATADIOPTRIQUE/ABFR	ABFR
Abstract (German)	/ABDE	S BEARBEITUNGSANLAGE/ABDE	ABDE
Abstract (other language)	/ABOL	S CATODICAMENTE/ABOL	ABOL
Abstract (Spanish)	/ABES	S BEBIDAS/ABES	ABES
Abstract Language (ISO code and text)	/AL	S DUTCH/AL	ALL, ALLO, IMAX, MAX, MAXO
Accession Number (=patent family number FN in INPADOCDB)	/AN	S 12345678/AN	AN
Application Country (WIPO code and text)	/AC	S WO/AC AND (INLAND(W)STEEL)/PA	AI
Application Date (1)	/AD	S 19840705/AD	AI
Application ID (EPO)	/DOCID	S 23400004/DOCID	DOCID
Application Kind Code	/AK	S WOW/AK	AI, AIT
Application Kind Code Text	/AIT	S MWA/AIT	AIT
Application Number	/AP	S ZW1981-215/AP	AI
Application Number Count (1)	/ACNT (or /APC)	S ACNT=3	FSTAT
Application Number, Original	/APO	S KR6900415/APO	APO
Application Year (1)	/AY	S 1988/AY AND SIEMENS/PAS	AI
Calculated Expiration Date (1)	/XPD	S XPD=AUG 2023	XPD
Calculated Expiration Year (1)	/XPY	S 2025-2026/XPY	XPY
Cooperative Patent Classification	/CPC	S D03D0015-0011/CPC	CPC
Country Number Count	/CCNT (or /CYC)	S 5/CCNT	FSTAT
CPC, Action Date (1)	/CPC.ACD	S 20130101/CPC.ACD	CPC.TAB
CPC, Combination Set Data	/CPC.CS	S A61K0009/CPC.CS	CPC.TAB
CPC, Keyword Terms	/CPC.KW	S INVENTION/CPC.KW	CPC.TAB
CPC, Version	/CPC.VER	S 20130101/CPC.VER	CPC.TAB
Data Availability	/DAV	S NOT-PRINTED-WITH-GRANT/DAV	DAV
Date in Force (1,3)	/DF	S 20000127/DF	DF
Designated States	/DS	S W JP/DS	DS
Document Number (INPADOCDB AN)	/DN	S 98543006/DN	DN
Document Type (code and text)	/DT (or /TC)	S U/DT AND UNILEVER/PAS	DT
Entry Date (1)	/ED	S L1 AND ED>2 JAN 2020	ED
Entry Date New Patent Family (1)	/EDF	S 20200604/EDF	EDF
Entry Date New Publication and/or New Legal Status (1)	/EDLS	S EDLS=20200514	not displayed
Entry Date Patent (1)	/EDP	S 20200123/EDP	EDP
Entry Date Priority (1)	/EDPR	S 2020 FEB/EDPR	PRAI
Entry Week (INPADOC) (1)	/EW	S 200816/EW	EW
Field Availability	/FA	S L7 AND AB/FA	FA
Filing Country for PCT Application (WIPO code and text)	/AC.WO	S FR/AC.WO	AI

## INPAFAMDB

## Bibliographic Search Fields (cont'd)

Search Field Name	Search Code	Search Examples	Display Codes
Filing Country for PCT Priorities (WIPO code and text)	/PRC.WO	S DE/PRC.WO	PRAI
Filing Details	/FDT	S DED1/FDT	FDT
International Patent Classification, Version 1-8 (contains IPCI, IPCR, ICM, ICS, ICA, ICI)	/IPC	S H05B0006-36+NT/IPC S H05B0006-36-H05B0006-44/IPC	IC, ICA, ICI, ICM, ICS, IPCI, IPCR IN
Inventor	/IN (or /AU)	S MILLER/IN	IN
Inventor Address	/INA	S HEIDELBERG/INA	INA
Inventor INPADOC Standard	/INS	S AGARWAL S?/INS	INS
Inventor, Country	/IN.CNY	S US/IN.CNY	INS
International Patent Classification, Version 1-7 (contains ICM, ICS, ICA, ICI)	/IC	S C07H019-16/IC	IC
IPC, Action Date	/IPC.ACD	S 13 JAN 2006/IPC.ACD	IPC.TAB
IPC, Additional (supplementary) Version 1-7	/ICA	S H06B006-02/ICA	ICA
IPC, Index (complementary) Version 1-7	/ICI	S C12P019-40/ICI	ICI
IPC, Keyword Terms	/IPC.KW	S INITIAL/IPC.KW	IPC.TAB
IPC, Main, Version 1-7	/ICM	S C23C0001-08/ICM	ICM
IPC, Secondary, Version 1-7	/ICS	S C12P0019-40/ICS	ICS
IPC, Version from IC	/IC.VER	S 7/IC.VER AND L5	IC.VER, IC
IPC, Version from IPC	/IPC.VER	S 200601/IPC.VER	IPC.TAB
Japanese Patent Classification (F-Terms)	/FCL (or /JPC)	S A01B0001-24 B/FCL	FCL
Japanese Patent Classification (F-Terms)	/FTRM (or /FTRM or /JPCLA)	S 5H030/AA00/FTRM	FTRM
Language (ISO code and text)	/LA	S DE/LA	LA
Language of Filing (ISO code and text)	/LAF	S FR/LAF	LAF
Patent Assignee (4)	/PA (or /CS)	S INLAND STEEL/PA S BROWN WILLIAMSON/CS	PA
Patent Assignee Address	/PAA	S US/PAA AND EASTMAN KODAK/PAS	PAA
Patent Assignee INPADOC Standard	/PAS	S INLAND STEEL CO?/PAS S (BROWN(S)TOBACCO)/PAS	PAS
Patent Assignee, Country	/PA.CNY	S GB/PA.CNY	PAS
Patent Country (WIPO code and text)	/PC	S DE/PC AND IBM/PAS AND 1988/PY	PI
Patent Country, Basic	/PC.B	S FR/PC.B	PI
Patent Information Publication Type	/PIT	S ARA1/PIT	PIT
Patent Kind Code	/PK	S ZWA1/PK	PI
Patent Kind Code, Basic	/PK.B	S EPA1/PK.B	PI
Patent Number (2)	/PN	S FI9902020/PN	PI
Patent Number, Basic (2)	/PN.B	S. CA2296922/PN.B	PI
Patent Number Count	/PCNT (or /PNC)	S 4/PCNT	FSTAT
Patent Number, Original	/PNO	S KR300392615S/PNO	PNO
Patent Number/Kind Code	/PNK	S WO2009006253A2/PNK	PNK
Patent Number/Kind Code, Basic	/PNK.B	S CA2296922A1/PNK.B	PNK
Patent Stage	/STA	S GRANTED/STA AND LASER/TI	STA
Patent Term Adjustment	/PTA	S 10-20/PTA	PTA
Priority Country (WIPO code and text)	/PRC	S JP/PRC AND 19880101/PRD	PRAI
Priority Country, First	/PRCF	S AU/PRCF	PRAI
Priority Number Count	/PRCNT	S 5/PRCNT	FSTAT
Priority Date (1)	/PRD	S JP/PRC AND 19880101-19880331/PRD	PRAI
Priority Date, First (1)	/PRDF	S MARCH 2009/PRDF	PRAI

## Bibliographic Search Fields (cont'd)

Search Field Name	Search Code	Search Examples	Display Codes
Priority Kind Code	/PRK	S DEA/PRK	PRAI
Priority Kind Text	/PRAIT	S ARA PATENT APPLICATION/PRAIT	PRAIT
Priority Number, Original	/PRNO	S KRD1997055047/PRNO	PNO
Priority Year (1)	/PRY	S 1998/PRY AND US/PRC	PRAI
Priority Year, First (1)	/PRYF	S GB/PC AND 1998/ PRYF	PRAI
Publication Date (1)	/PD	S 19990104/PD	PI
Publication Date, Basic (1)	/PD.B	S 20000815/PD.B	PI
Publication ID (EPO)	/PUBID	S 23409/PUBID	PUBID
Publication Year (1)	/PY	S 1999/PY	PI
Publication Year, Basic (1)	/PY.B	S 2000/PY.B	PI
Simple Family Number (EPO)	/SFN	S 12300006/SFN	SFN
Simple Family Number Count (EPO) (1)	/SFCNT	S 5/SFCNT	FSTAT
Status Established Date	/STED	S 20210806/STED	STED
Status Indicator	/STI	S DEADSTI or S D/STI	STI
Title (English)	/TIEN	S CATABOLIC/TIEN	TIEN
Title (French)	/TIFR	S CATADIOPTRIQUE/TIFR	TIFR
Title (German)	/TIDE	S BEARBEITUNGSANLAGE/TIDE	TIDE
Title (other language)	/TIOL	S CATODICAMENTE/TIOL	TIOL
Title (Spanish)	/TIES	S BEBIDAS/TIES	TIES
Title Language (ISO code and text)	/TL	S EN/TL S ENGLISH/TL	TL
Title of Invention (contains TIDE, TIEN, TIES, TIFR, TIOL)	/TI	S (FILTER? (S) ELECTR? (S) MEMBRAN#)/TI	TI, TIDE, TIEN, TIES, TIFR, TIOL, TIO
Update Date (1)	/UP	S L1 AND UP>20200102	UP
Update Date All Patent Changes (1)	/UPM	S L1 AND 20210702/UPM	not displayed
Update Date Classifications (1)	/UPCC	S L1 AND UPCC> 20210702	UPALL
Update Date for combined or split Patent Family	/UPFC	S UPFC=OCT 2019	UPALL
Update Date New Patent Family Record (1)	/UPFD	S 20210702/UPFD	UPALL
Update Date New Publication and/or Legal Status Changes of the family (all updates in /UPFB, /UPFL) (1)	/UPFE	S 20210702/UPFE	UPALL
Update Date of the BIB fields (1)	/UPBB	S L1 AND UPBB> 20210702	UPALL
Update Date Patent Family (1) (all updates in /UPFB, /UPFC, /UPFL)	/UPFA	S 20210702/UPFA	UPALL
Update Date Patent Family Legal Status (1)	/UPFL	S 20210702/UPFL	UPALL
Update Date Patent Family Publication Level (1)	/UPFP	S 20210702/UPFP	UPALL
Update Date Patent Family Bibliographic (1)	/UPFB	S 20210702/UPFB AND L7	UPALL
Update Week (INPADOC Week) (1)	/UW	S UW=202006	UW

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

(2) Either STN format or Derwent format may be used.

(3) For German Utility Models: Advertisement of registration.

(4) Search with implied (S) proximity is available.

## Legal Status Search Fields

Search Field Name	Search Code	Search Examples	Display Codes
Entry Date new publication and/or New Legal Status <b>(1)</b>	/EDLS	S EDLS=FEB 2019	not displayed
Legal Status Basic Index (contains legal status agent (LSAG), legal status free format text (LSFT), legal status inventor (LSIN), legal status patent opponent (LSOP), and legal status patent assignee (LSPA) fields)	/LSBI	S LASER?/LSBI S ANACOMP/LSBI S OPPOSITE/LSBI	LS
Legal Status Code (code and text)	/LSC	S EP111L/LSC	LS
Legal Status Code Category	/LSC2	S LAP/LSC2	LS
Legal Status Code Country (WIPO code and text)	/LSCC	S BE/LSCC	LS
Legal Status Country (WIPO code and text)	/LSCY	S UNITED KINGDOM/LSCY	LS
Legal Status Date in Force <b>(1)</b>	/LSDF	S LSDF=20050109	LS
Legal Status Date INPADOC GAZETTE <b>(1)</b>	/LSD	S LSD=JAN 2020	LS
Legal Status Designated States (WIPO code and text)	/LSDS	S AU/LSDS S AUSTRALIA/LSDS	LS
Legal Status Event Class	/LSEC	S D/LSEC	LS
Legal Status Free Format Text	/LSFT	S TELECOMMUNICATION/LSFT	LS
Legal Status Indicator	/LSCI	S POSITIVE/LSCI	LS
Legal Status IPC	/LSIC	S A01B0001/24/LSIC	LS
Legal Status Licensee	/LSLI	S BAYER/LSLI	LS
Legal Status Number Count	/LSCNT	S 30-40/LSCNT	LS
Legal Status Patent Inventor	/LSIN	S MAYER, BERND/LSIN S (MAYER(S)BERND)/LSIN	LS
Legal Status Represen./Agent	/LSAG	S (LORENZ AND PHILIPPS)/LSAG	LS
Legal Status Code Text	/LSTX	S CORRECTION/LSTX	LS
Legal Status Patent Assignee <b>(2)</b>	/LSPA	S (MAN CERAMICS)/LSPA	LS
Legal Status Patent Opponent	/LSOP	S SIEMENS AG/LSOP	LS
Legal Status, Payment Year <b>(1)</b>	/LSPMY	S 6/LSPMY	LS
Legal Status Publication Country (WIPO code and text)	/LSPC	S CA/LSPC S CANADA/LSPC	LS
Legal Status Publication Date <b>(1)</b>	/LSPD	S LSPD=JAN 1998	LS
Legal Status Publication Kind Code	/LSPK	S ESA1/LSPK	LS
Legal Status Publication Number	/LSPN	S EP200212/LSPN	LS
Legal Status Publication Year <b>(1)</b>	/LSPY	S 1999-2000/LSPY	LS
Legal Status SPC Number	/LSSPC	S SPC/GB00/007/LSSPC	LS
Legal Status SPC, Expiry Date <b>(1)</b>	/LSSPC.XD	S LSSPC.XD>2025	LS
Legal Status SPC, Extension Date <b>(1)</b>	/LSSPC.EX	S 20230930/LSSPC.EX	LS
Legal Status SPC, Filing Date <b>(1)</b>	/LSSPC.FD	S 20190102- 20190116/LSSPC.FD	LS
Update Date Legal Status <b>(1)</b>	/UPLS	S 20200827/UPLS	LS, LSUP

**(1)** Numeric search field that may be searched using numeric operators or ranges.

**(2)** Search with implied (S) proximity is available.

## Super Search Fields

Enter a super search code to execute a search in one or more fields that may contain the desired information. Super search fields facilitate crossfile and multifile searching. EXPAND may not be used with super search fields. Use EXPAND with the individual field codes instead.

Search Field Name	Search Code	Fields Searched	Search Examples	Display Codes
Application Number Group (1)	/APPS	/AP, /APO, /PRN, /PRNO	S DE1984-3400052/APPS S 1984DE-3400052/APPS	AI, APO, PRAI, PRNO
Inventor Group Patent Assignee Group (2)	/INSS /PASS	/IN, /INS, /LSIN /PA, /PAS, /LSPA	S MEIE/INSS S FOOD AUTOMAT?/PASS	IN, INS, LS PA, PAS, LS
Patent Number Group (1)	/PATS	/PN, /PNO, /LSPN	S WO2019003340/PATS	PI, PNO, LS
Patent Countries	/PCS	/DS, /PC	S DE/PCS	PI, DS

(1) Either STN or Derwent format may be used.

(2) Search with implied (S) proximity is available in this field.

## IPC THESAURUS

The classifications, validity and catchwords for the main headings and subheadings from the current (8<sup>th</sup>) 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 1-8, use the field code followed by the edition number, e.g., /IPC2 for the 2<sup>nd</sup> edition. Catchwords are included only in the thesauri for the 8<sup>th</sup>, 7<sup>th</sup>, 6<sup>th</sup>, and 5<sup>th</sup> editions.

Code	Content	Examples
ADVANCED (ADV)	Advanced Level Codes for the Core Level IPC Code	E A61K0066-02+ADVANCED/IPC
ALL	All Associated Class Terms (BT, SELF, NT, RT)	E C01C003-00+ALL/IPC
BRO (MAN)	Complete Class	E C01C+BRO/IPC
BT	Broader Term (SELF, BT)	E C01F001-00+BT/IPC
BTn	Broader Term (SELF, BT) up to the next n levels (n =1,2,...)	E C01F001-21+BT2/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	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
NTn	Narrower Terms (SELF, NT) down to the next n levels (n =1,2,...)	E C01C+NT3/IPC
PREV	Previous Code within the same class (SELF, PREV)	E C01C001-12+PREV/IPC
PREV(n)	Previous n classifications within the same class	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

## CPC Thesaurus

The thesaurus is available in the/CPC search field. All relationship codes can be used with both the EXPAND and SEARCH commands.

Relationship Code	Content	Search Examples
ALL AUTO (1) BT CODE	All usually required terms (BT, SELF, CODE, DEF) Automatic relationship (BT, SELF, CODE, DEF) Broader terms (BT, SELF) Classification Code (SELF, CODE)	E C12M0001-34H2+ALL/CPC E G01J003-443+AUTO/CPC E G01J0003-443+BT/CPC E SCRAPER BIASING MEANS+CODE/CPC
DEF HIE	Definition (SELF, DEF) Hierarchy terms (all broader and narrower terms) (BT, SELF, DEF, NT)	E B65G0045-16+DEF/CPC E A01B0001+HIE/CPC
KT MAX NEXT NEXT(n) NT PREV PREV(n) TI	Keyword terms (SELF, KT) All associated terms Next classification within the same class (SELF, NEXT) Next n classification within the same class Narrower terms Previous Code within the same class (SELF, PREV) Previous n classifications within the same class Complete Title of the SELF Term and Broader Terms (BT, SELF)	E LASER+KT/CPC E G01J0003-44B+MAX/CPC E A01B0001-24+NEXT/CPC E A01B0001-24+NEXT3/CPC E G05B0001-04+NT/CPC E G05B0019-418N1+PREV/CPC E G05B0019-418N1+PREV2/CPC E G05B0001-03+TI/CPC

(1) Automatic Relationship is SET OFF. In case of SET REL ON the result of EXPAND or SEARCH without any relationship code is the same as described for AUTO.

## 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 FAM MFAM. The fields are displayed or printed in the order requested. The content for some fields and formats is de-duplicated in INPAFAMDB. Depending on the content the de-duplicated display for a single field is charged with the full family price, when the family information for this field is displayed in full.

Hit-term highlighting is available for all fields. Highlighting must be ON during SEARCH to use the HIT, KWIC, OCC and .H formats.

You can combine all display fields and formats with suffices (will be charged as a full family display):

- .B shows the earliest publication (basic)
- .M shows the complete family
- .H shows only the publications where a HIT of a search occurs
- .P shows the latest publication(s)
- .U shows the latest updated publication(s)

The default format is the format BRIEF with de-duplicated content of the fields TI, TIO, INS, INO, PAS, PAO, IPCI, IPCR, CPC, FTRM, FCL, and 1 selected English abstracts (IN, PA when INS, PAS is not available).

The English abstract is either from EP, WO, GB, another English equivalent abstract or one original language abstract.

An overview of special family formats (details of the formats see below)



## DISPLAY and PRINT Family Formats

Dedup. FAMILY formats	.B earliest publ.	.M (=M) complete family	.H publ. with HIT *)	.P latest publ.	.U latest update
BRIEF (default)					
BIB	BIB.B	BIB.M	BIB.H	BIB.P	BIB.U
IBIB	IBIB.B	IBIB.M	IBIB.H	IBIB.P	IBIB.U
STD	STD.B	STD.M	STD.H	STD.P	STD.U
ALL	ALL.B	ALL.M	ALL.H	ALL.P	ALL.U
ALLO	ALLO.B	ALLO.M	ALLO.H	ALLO.P	ALLO.U
IALL	IALL.B	IALL.M	IALL.H	IALL.P	IALL.U
IND					
	MAX.B		MAX.H	MAX.P	MAX.U
	MAXO.B		MAXO.H	MAXO.P	MAX.U
	IMAX.B		IMAX.H	MAXO.P	IMAX.U
	PI.B		PI.H	PI.P	PI.U
	PI.PDF.B		PI.PDF.H		PI.PDF.U
		TI.M	TI.H		

\*) Displays data of all family members and/or legal status (in MAX-formats) with HIT terms.

## DISPLAY and PRINT Formats

(DE-DUP= De-duplicated family content)

Family related Display Formats	DE-DUP (D)	Definition	Examples
ABS	-	AN, AL, AS, ABDE, ABEN, ABES, ABFR, ABOL	D ABS
ALL (1)	D	BIB, plus AB, IND, FA	D ALL 6
IALL (1)	D	ALL, indented with text labels	D IALL L3 7
ALLO	D	ALL, PNO, APO, PRNO, FSTAT, plus data in original characters (UTF-8)	D ALLO
BIB (1)	-	AN, EWF, UWF, EDF, UPFB, UPFC, TIDE, TIEN, TIES, TIFR, TIOL, TIO, INS, INO, PAS, PAO, PI, AI, PRAI, FSTAT deduplicated: AN, EDF, EWF, UPFB, UWF, UPFC, TI, INS, PAS, PI, AI, PRAI, REC	D BIB
IBIB (1)	D	BIB, indented with text labels	D 5 IBIB
BRIEF	D	AN, EWF, UWF, EDF, UPFB, UPFC, TIEN, INS, PAS, IPCI, IPCR, CPC, FTRM, FCL, FSTAT (IN, PA when INS, PAS not available), 1 selected English abstract and a patent family table of PI, AI, and PRAI (BRIEF is the default)	D BRIEF
CODE	-	AN, EWF, UWF, EDF, UPFB, UPFC, IND	D CODE
IC	D	AN, ED, EW, UP, UW, IPC, CPC, IFTRM, FCL	D L5 IND
IND		International Patent Classification, Version 1-7 (ICM, ICS, ICA, ICI)	D IC
IPC		International Patent Classification, Version 1-8 (ICM, ICS, ICA, ICI, IPCI, IPCR)	D IPC
MAX (1)	-	BIB, plus AB, IND, SFN, PUBID, DOCID, FA, LS, for all family members	D MAX
IMAX (1)	-	MAX, with indented text labels	D IMAX
MAXO (1)	-	MAX, PNO, APO, PRNO plus data in original characters (UTF-8)	D MAX
MAXO2 (1)	-	MAXO, plus display of special characters in the abstract	D MAXO2
STD (1)	D	BIB, IND	D STD

## INPAFAMDB

**DISPLAY and PRINT Formats (cont'd)**

(DE-DUP= De-duplicated family content)

Family related Display Formats	DE-DUP (D)	Definition	Examples
UPALL TIPI (1) PILS (1,4) BIBLS (1) CFAM (1) CFAM2 (1) DFAM (1) EFAM (1)	- - - - - - -	Table of update dates (AN, UPFC, UPFB, UPFD, EDF, DN, EDP, UP, ED) TI + PI for all patent family members, FSTAT PI + LS for all patent family members, FSTAT BIB + LS for all patent family members Condensed family table with AN, PI, STI, FSTAT Condensed family table with AN, PI, AI, PRAI, STI, STED, FSTAT FAM, delimited for post processing FAM, but the priority information constitutes the header	D UPALL D TIPI D PILS D BIBLS D CFAM D CFAM2 D DFAM D EFAM
FAM (1) FAM2 (1) FAMLS (1) FFAM (1) FFAM.PC (1,2) FSTAT IFAM (1) IFAM2 LFAM (1) MFAM (1) MFAM.PC (1,2) PI.PDF (1) SFAM (1) SCAN (3)	- - - - - - - - - - - - - -	AN, table of patent family information (PI, AI, PRAI) and relationships, FSTAT AN, table of patent family information, another order Comprises the family table CFAM2 plus a list of all legal status entries, sorted by legal status date LSD STD + LS for each member of the family FFAM for a specified country only All counted numbers: PRCNT, ACNT, PCNT, SFCNT, CCNT, LSCNT Combines indented FAM and IMAX, ordered alphabetically by patent offices with the respective country code and name as header IFAM, without abstract and classification AN, DN, PI, STI plus legal status information for all members of a patent family MAX for each family member MAX for each family member for a specific country only Patent family PI information plus hyperlinks to the original documents (pdf) in espacenet Display of the EPO 'simple patent family' (SFN) within the INPADOC patent family table TI latest publication (random display without answer number)	D FAM D FAM2 D FAMLS D FFAM D FFAM.US D FSTAT D IFAM D IFAM2 D LFAM D MFAM D MFAM.EP D PI.PDF D SFAM D SCAN
TRIAL (TRI, FREE, SAMPLE, SAM)	D	one TI (TIEN), IPCI, IPCR, CPC, FTRM, FCL, FA	D TRIAL 5

(1) Application, patent, and priority number are available in STN and Derwent 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) PC = all patent countries.

(3) SCAN must be specified on the command line, i.e., D SCAN or DISPLAY SCAN.

(4) In format PILS legal status is displayed without the information PRI, APP, and PUB.

**DISPLAY Fields**

If a single field name is entered, either the de-duplicated content or the full family information for this field will be displayed (and in this latter case the field will be charged with the full family price)

Display Fields	DE-DUP	Definition	Examples
AB	D	Abstract	D AB
ABDE	D	Abstract German	D ABDE
ABEN	D	Abstract English	D ABEN
ABES	D	Abstract Spanish	D ABES
ABFR	D	Abstract French	D ABFR
ABO	D	Abstract, Original	D ABO
ABOL	D	Abstract (other language)	D ABOL
AI (AP) (1)	-	Application Information	D AI
AIT	D	Application Kind Code Text	D AIT
AN	-	Accession Number	D AN
APO	-	Application Number Original	D APO
APPS (1)	-	Application Number Group	D APPS
CPC	D	Cooperative Patent Classification	D CPC
DAV	-	Data Availability	D DAV
DF	-	Date in Force	D DF
DN	-	Document Number (INPADOCDB AN)	D DN
DOCID	-	Application ID	D DOCID
DS	-	Designated States	D DS
DT (TC)	-	Document Type	D DT
ED	D	Entry Date	D 1-5 ED UP
EDP	-	Entry Date Patent	D EDP
EW	D	Entry Week	D EW
FA	D	Field Availability	D FA
FCL (JPC)	D	Japanese Patent Classifications (FI-Terms)	D FCL
FDT	D	Filing Details	D FDT
FSTAT	D	PRCNT, ACNT, PCNT, SFCNT, CCNT, LSCNT	D FSTAT
FTRM (FTERM, FTCLA, JPCLA)	D	Japanese Patent Classifications (F-Terms)	D FTRM
IC		International Patent Classification	D IC
ICA	D	IPC, Additional (supplementary)	D ICA
ICI	D	IPC, Index (complementary)	D ICI
ICM	D	IPC, Main	D ICM L7
ICS	D	IPC, Secondary	D ICS
IN (AU)	D	Inventor	D IN
IN.CNY	-	Inventor, Country	D INS
INA	D	Inventor Address	D INA
INO	-	Inventor, Original	D INO, D ALLO
INS	D	Inventor INPADOC Standard	D INS
IPCI	D	IPC, Initial	D IPCI
IPCR	D	IPC, Reclassified	D IPCR
LA	D	Language	D LA
LAF	D	Language of Filing	D LAF
PA (CS)	D	Patent Assignee	D PA TI 1-10
PAA	-	Patent Assignee Address	D PAA
PA.CNY	-	Patent Assignee, Country	D PA.CNY
PAO	-	Patent Assignee, Original	D PAO, D ALLO
PAS	D	Patent Assignee INPADOC Standard	D PAS
PI (PN) (1)	-	Patent Information	D PI
PIT	-	Patent Information Publication Type	D PIT 1-5

## INPAFAMDB

## DISPLAY Fields (cont'd)

Display Fields	DE-DUP	Definition	Examples
PNK	-	Patent Number/Kind Code	D PNK
PNO	-	Patent Number Original	D PNO
PRAI (PRN) (1)	D	Priority Information	D PRAI
PRAIT	D	Priority Kind Text	D PRAIT
PRNO	-	Priority Application Number, Original	D ALLO
PTA	-	Patent Term Adjustment	D PTA
PUBID	-	Publication ID	D PUBID
SFN	-	Simple Family Number (EPO)	D SFN
STA	-	Patent Stage	D STA
STED	-	Status Established Date	D STED
STI	-	Status Indicator	D STI
TI	D	Title	D TI
TIDE	D	Title (German)	D TIDE
TIEN	D	Title (English)	D TIEN
TIES	D	Title (Spanish)	D TIES
TIFR	D	Title (French)	D TIFR
TIO	D	Title, Original	D TIO
TIOL	D	Title (other language)	D TIOL
TL	D	Title Language	D TL
UP	D	Update Date	D UP
UW	D	Update Week (INPADOC Week)	D UW
XPD	-	Calculated Expiration Date	D XPD
XPY	-	Calculated Expiration Year	D XPY
HIT	-	Hit term(s) and field(s)	D HIT
KWIC	-	Up to 50 words before and after hit term(s) (KeyWord-In-Context)	D KWIC
OCC	-	Number of occurrences of hit term(s) and field(s) in which they occur	D OCC

- (2) Application, patent, and priority number are available in STN and Derwent 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.

## Default sorting within the Patent Family Display Formats

Format	Default sorted by
FAM	PRN (Priority Number)
DFAM	PRN (Priority Number)
EFAM	PRN (Priority Number)
FFAM	PN (Patent Number) of the highest level
LFAM	PN (Patent Number) of the highest level
CFAM	AP (Application Number)

## UPDATE and SDI

### UPDATE CODES (for SDI also)

Update codes or entry dates associated with records

Field Name	Search Code	Search Examples	Display Code
Entry Date	/ED	S L1 AND ED>DEC 2019	ED
Entry Date + Legal Status Update	/EDLS	S 20200924/EDLS	not displayed
Entry Date Patent	/EDP	S 20200109/EDP	EDP, UPALL
Entry Date Priority	/EDPR	S 20200924/EDPR	PRAI
Update Date	/UP	S 20200102 /UP	LS
Update Date of the BIB fields	/UPBB	S L1 AND UPBB> 20200102	UPALL
Update Date Classifications	/UPCC	S L1 AND UPCC> 20200102	UPALL
Update Legal Status	/UPLS	S 20200102/UPLS	LS
All updates of a record	/UPM	S 20200102/UPM	not displayed
Entry Date new patent family	/EDF	S L1 AND EDF>21 MAR 2020	UPALL
All changes in a patent family	/UPFA	S L1 AND 20200102/UPFA	not displayed
Any change of a bibliographic element in a patent family	/UPFB	S L1 AND 20200102/UPFB	UPALL
Update Date for combined or split Patent Family (1)	/UPFC	S L1 AND UPFC=OCT 2019	UPFC
Entry of a new database record document) into a patent family (level 1)	/UPFD	S L1 AND 20200102UPFD	UPALL
Entry of a new publication and changes in legal status	/UPFE	S L1 AND 20200102/UPFE	not displayed
Any change of a legal status in a patent family	/UPFL	S L1 AND 20200102/UPFL	UPALL
Entry of a new publication level into a patent family	/UPFP	S L1 AND 20200102/UPFP	UPALL

### Family Display and Print Formats – Weekly SDI

Format	Definition	Examples
FFAMED	STD for new publications and/or LSUP for each updated family	D FFAMED
IFAMED	Indented FFAMED plus patent family table	D IFAMED
FFAMED.PC	FFAMED for a specific country only	D FFAMED.US
FFAMUP	STD + LS for each updated family	D FFAMUP
IFAMUP	Indented FFAMUP plus patent family table	D IFAMUP
FFAMUP.PC	FFAMUP for a specific country only	D FFAMUP.WO
LFAMUP	AN, PI, LSUP for all updated members of a patent family	D LFAMUP
LFAMUP.PC	LFAMUP for a specific country only	D LFAMUP.EP

### Family Display and Print Formats – Monthly SDI

Format	Definition	Examples
FFAMED4	STD for new publications and/or LSUP for each updated family	D FFAMED4
IFAMED4	Indented FFAMED4 plus patent family table	D IFAMED4
FFAMUP4	STD + LS for each updated family	D FFAMUP4
IFAMUP4	Indented FFAMUP4 plus patent family table	D IFAMED4
LFAMUP4	AN, PI, LSUP for all updated members of a patent family	D LFAMUP4

**INPAFAMDB****SELECT, ANALYZE, and SORT Fields**

The SELECT command is used to create E-numbers containing terms taken from the specified field 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 alphabetic or numeric order of the specified field(s).

Field Name	Field Code	ANALYZE/ SELECT (1)	SORT
Abstract	AB	Y	N
Abstract (English)	ABEN	Y	N
Abstract (French)	ABFR	Y (2)	N
Abstract (German)	ABDE	Y (2)	N
Abstract (other language)	ABOL	Y (2)	N
Abstract (Spanish)	ABES	Y (2)	N
Accession Number	AN	Y	Y
Application Country	AC	Y	N
Application Date	AD	Y	N
Application Kind Code	AK	Y	N
Application Kind Code Text	AIT	Y	N
Application Number	AP (AI)	Y (3)	N
Application Number Count	ACNT	Y	Y
Application Number Group	APPS	Y (3,4)	N
Application Number, Original	APO	Y	N
Application Year	AY	Y	N
Calculated Expiration Date	XPD	Y	N
Calculated Expiration Year	XPY	Y	N
Cooperative Patent Classification	CPC	Y	N
Country Number Count	CCNT	Y	Y
Date in Force	DF	Y	N
Designated State	DS	Y	N
Document Type	DT (TC)	Y	N
Entry Date	ED	Y	N
Entry Date Patent	EDP	Y	N
Entry Week	EW	Y	N
EPO Simple Family Member Count	SFCNT	Y	Y
Filing Details	FDT	Y	N
INPADOCDB Document Number	DN	Y	N
International Patent Classification	IC	Y	N
International Patent Classification	IPC	Y	N
Inventor	IN (AU)	Y	N
Inventor, Country	IN.CNY	Y	N
Inventor Address	INA	Y	N
Inventor INPADOC Standard	INS	Y	N
IPC, Additional (supplementary)	ICA	Y	N
IPC, First	IPCF	Y	N
IPC, Index (complementary)	ICI	Y	N
IPC, Initial	IPCI	Y (5)	N
IPC, Main	ICM	Y	N
IPC, Reclassified	IPCR	Y (5)	N
IPC, Secondary	ICS	Y	N
Japanese Patent Classification (FI-Terms)	FCL	Y	N
Japanese Patent Classification (F-Terms)	FTRM	Y	N
Language	LA	Y	N
Language of Filing	LAF	Y	N
Legal Status Code	LSC	Y	N
Legal Status Code Category	LSC2	Y	N
Legal Status Code Country	LSCC	Y	N
Legal Status Count	LSCNT	Y	Y
Legal Status Date INPADOC GAZETTE	LSD	Y	N
Legal Status Event Class	LSEC	Y	N
Legal Status Free Format Text	LSFT	Y	N

**SELECT, ANALYZE, and SORT Fields (cont'd)**

Field Name	Field Code	ANALYZE/ SELECT (1)	SORT
Legal Status IPC	LSIC	Y	N
Legal Status Patent Assignee	LSPA	Y	N
Legal Status Patent Inventor	LSIN	Y	N
Legal Status Patent Opponent	LSOP	Y	N
Legal Status, Payment Year	LSPMY	Y	N
Legal Status Publication Country	LSPC	Y	N
Legal Status Publication Date	LSPD	Y	N
Legal Status Publication Number	LSPN	Y	N
Legal Status Representative/Agent	LSAG	Y	N
Legal Status SPC Number	LSSPC	Y	N
Legal Status SPC, Expiry Date	LSSPC.XD	Y	N
Legal Status SPC, Extension Date	LSSPC.EX	Y	N
Legal Status SPC, Filing Date	LSSPC.FD	Y	N
Occurrence Count of Hit Terms	OCC	N	Y
Patent Assignee	PA (CS)	Y	N
Patent Assignee Address	PAA	Y	N
Patent Assignee, Country	PA.CNY	Y	N
Patent Assignee INPADOC Standard	PAS	Y	N
Patent Number Group	PATS	Y (3,6)	N
Patent Number/Kind Code	PNK	Y	N
Patent Country	PC	Y	N
Patent Information Publication Type	PIT	Y	N
Patent Kind Code	PK	Y	N
Patent Number	PN (PI)	Y (3)	N
Patent Number, Original	PNO	Y	N
Patent Stage	STA	Y	N
Patent Term Adjustment	PTA	Y	N
Priority Country	PRC	Y	N
Priority Country, First	PRCF	Y	Y
Priority Date	PRD	Y	N
Priority Date, First	PRDF	Y	Y
Priority Kind Code	PRK	Y	Y
Priority Kind Text	PRAIT	Y	N
Priority Number	PRN (PRAI)	Y (3)	N
Priority Number Count	PRCNT	Y	Y
Priority Number, Original	PRNO	Y	N
Priority Year	PRY	Y	N
Priority Year, First	PRYF	Y (7)	Y
Publication Date	PD	Y	N
Publication Year	PY	Y	N
Status Established Date	STED	Y	N
Status Indicator	STI	Y	N
Title	TI	Y (default)	N
Title (English)	TIEN	Y	N
Title (French)	TIFR	Y	N
Title (German)	TIDE	Y	N
Title (Spanish)	TIES	Y	N

**SELECT, ANALYZE, and SORT Fields (cont'd)**

Field Name	Field Code	ANALYZE/ SELECT (1)	SORT
Title (other language)	TIOL	Y	N
Title Language	TL	Y	N
Update Date	UP	Y	N
Update Week	UW	Y	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.
- (2) Appends /AB to the terms created by SELECT.
- (3) SELECTed and SORTed application, priority and patent numbers are in the format set by the Messenger SET PATENT command, either DERWENT or STN.
- (4) Selects or analyzes AP, PRN, and appends /APPS to the terms created by SELECT.
- (5) Appends /IPC to the terms created by SELECT.
- (6) Selects or analyzes /PN, /RPN with /PATS appended to the terms created by SELECT.
- (7) SELECT or ANALYZE HIT are not valid with this field.

**Sample Records****DISPLAY BRIEF (default)**

AN 65149450 INPAFAMDB EWF 201947 UWF 202052 EDF 20191121 UPFB 20201224

TI POSITION SENSING DEVICE

INS MUNDER GUNNAR, DE; TEICHMANN PETER, DE

PAS MELEXIS TECHNOLOGIES NV, BE

IPCI G01B0007-00; G01D0001-16; G01D0005-20

CPC G01B0007-003; G01D0001-16; G01D0005-204; G01D0005-2013; G01D0005-2053

AB The present invention relates to a device for position sensing comprising sensing means arranged for producing at least two sensor signals (INO, IN1, IN2), and a signal construction unit (40) arranged for obtaining from said at least two sensor signals at least two time-synchronous signals, said signal construction unit comprising- selection means (21) for selecting in a serial way one of the at least two time-synchronous signals,- sampling means (15) for sampling the selected time-synchronous signal at given sampling instants,- storage means (34) for storing sampled data representing the selected time-synchronous signal and timing information indicating which of the given sampling instants were used to obtain the sampled data,- processing means (33) for determining at one of the given sampling instants a value for at least one of said time-synchronous signals that was not sampled at the one given sampling instant by performing an interpolation using data values of the at least one time synchronous signal stored in the storage means and obtained at another point in time than the one given sampling instant. (EP3569986 A1).

**PATENT FAMILY INFORMATION INPAFAMDB**

```

+----- Publications -----+ +----- Applications -----+ +- STI +-
CN 110487304      A  20191122  CN 2019-10211238      A  20190320      A
CN 110487304      B  20200414
EP 3569986        A1 20191120  EP 2018-172083      A  20180514      I
EP 3569986        B1 20200408
US 20190346249    A1 20191114  US 2019-16411351    A  20190514      A
US 10866079       B2 20201215

```

```

+----- Priorities -----+
EP 2018-172083      A  20180514

```

FSTAT 1 priority, 3 applications, 6 publications (1 EPO simple family)  
3 countries, 52 legal status events



**DISPLAY FAM**

PATENT FAMILY INFORMATION  
AN 65149450 INPAFAMDB

```

+-----PRAI-----+          +-----AI-----+
EP 2018-172083      A  20180514      CN 2019-10211238      A  20190320
                                     EP 2018-172083      A  20180514
                                     US 2019-16411351      A  20190514

+-----AI-----+          +-----PI-----+
CN 2019-10211238      A  20190320      CN 110487304          A  20191122
                                     CN 110487304          B  20200414
EP 2018-172083      A  20180514      EP 3569986           A1 20191120
                                     EP 3569986           B1 20200408
US 2019-16411351      A  20190514      US 20190346249       A1 20191114

```

1 priority, 3 applications, 5 publications (1 EPO simple family)  
3 countries, 27 legal status events

**DISPLAY CFAM**

AN 65149450 INPAFAMDB

PATENT FAMILY INFORMATION

```

+----- Publications -----+    +-- Status ---+    +--- Status Date ---+
CN 110487304      A  20191122      ALIVE                20201121
CN 110487304      B  20200414      ALIVE                20201121
EP 3569986        A1 20191120      INDETERMINATE       20201107
EP 3569986        B1 20200408      INDETERMINATE       20201106
US 20190346249    A1 20191114      ALIVE                20201121
US 10866079       B2 20201215      ALIVE                20201224

```

FSTAT 1 priority, 3 applications, 6 publications (1 EPO simple family)  
3 countries, 52 legal status events

**DISPLAY LFAM**

-----  
MEMBER 1  
-----

AN 65149450 INPAFAMDB ED 20191205 EW 201949 UP 20200528 UW 202052  
DN 98159413  
PI CN 110487304 A 20191122  
STI ALIVE

AN 65149450 INPAFAMDB ED 20200423 EW 202017 UP 20200528 UW 202052  
DN 98159413  
PI CN 110487304 B 20200414  
STI ALIVE

LEGAL STATUS  
20191122 CNPB01 PUBLICATION  
PUB New or Withdrawn Publication  
Q DOCUMENT PUBLICATION  
.....20191212  
20200306 CNSE01 ENTRY INTO FORCE OF REQUEST FOR SUBSTANTIVE EXAMINATION  
EXA Examination, Search Report  
D SEARCH AND EXAMINATION  
.....20200326  
20200414 CNGR01 + PATENT GRANT  
MIS Miscellaneous or Ambiguous

## INPAFAMDB

F IP RIGHT GRANT  
 .....20200507

-----  
 MEMBER 2  
 -----

AN 65149450 INPAFAMDB ED 20191121 EW 201947 UP 20200528 UW 202052  
 DN 97947441  
 PI EP 3569986 A1 20191120  
 STI INDETERMINATE

AN 65149450 INPAFAMDB ED 20200409 EW 202015 UP 20200528 UW 202052  
 DN 97947441  
 PI EP 3569986 B1 20200408  
 STI INDETERMINATE

## LEGAL STATUS

20191120 EPAX + REQUEST FOR EXTENSION OF THE EUROPEAN PATENT  
 BA ME  
 MIS Miscellaneous or Ambiguous  
 W OTHER  
 .....20191128

20191120 EPAK + DESIGNATED CONTRACTING STATES  
 EP A1  
 AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT  
 LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR  
 MIS Miscellaneous or Ambiguous  
 W OTHER  
 .....20191128

20191120 EP17P + REQUEST FOR EXAMINATION FILED  
 20181030  
 EXA Examination, Search Report  
 D SEARCH AND EXAMINATION  
 .....20191128

20200109 EPGRAP + DESPATCH OF COMMUNICATION OF INTENTION TO GRANT A PATENT  
 ORIGINAL CODE: EPIDOSNIGR1  
 EXA Examination, Search Report  
 D SEARCH AND EXAMINATION  
 .....20201022

20200115 EPRIC1 INFORMATION PROVIDED ON IPC CODE ASSIGNED BEFORE GRANT  
 G01D0001/16  
 CLA Change, Removal or Addition of Classifications  
 Y CORRECTION AND DELETION OF EVENT INFORMATION  
 .....20200123

20200115 EPRIC1 INFORMATION PROVIDED ON IPC CODE ASSIGNED BEFORE GRANT  
 G01D0005/20  
 CLA Change, Removal or Addition of Classifications  
 Y CORRECTION AND DELETION OF EVENT INFORMATION  
 .....20200123

20200205 EPINTG + INTENTION TO GRANT ANNOUNCED  
 20200110  
 EXA Examination, Search Report  
 D SEARCH AND EXAMINATION  
 .....20200213

20200224 EPGRAS + GRANT FEE PAID  
 ORIGINAL CODE: EPIDOSNIGR3  
 FEE Fee Payment  
 U PAYMENT  
 .....20201022

20200306 EPGRAA + (EXPECTED) GRANT  
 ORIGINAL CODE: 0009210  
 MIS Miscellaneous or Ambiguous  
 F IP RIGHT GRANT  
 .....20201022

20200408 EPAK + DESIGNATED CONTRACTING STATES  
 EP B1

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT  
LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR  
MIS Miscellaneous or Ambiguous  
W OTHER

20200415 EPREG  
ATREF  
.....20200416  
REFERENCE TO A NATIONAL CODE  
+ AT: REFERENCE TO AT NUMBER (EP PATENT ENTERS AUSTRIAN NATIONAL  
PHASE)  
AT 1254997 T  
AT: 20200415  
ENP Entry into National Phase  
W OTHER

20200415 EPREG  
CHEP  
.....20200423  
REFERENCE TO A NATIONAL CODE  
+ CH: EUROPEAN PATENT TAKES EFFECT AS A NATIONAL PATENT IN CH/LI  
CH  
ENP Entry into National Phase  
W OTHER

20200430 EPREG  
DER096  
.....20200423  
REFERENCE TO A NATIONAL CODE  
+ DE: DPMA PUBLICATION OF MENTIONED EP PATENT GRANT  
DE 602018003535  
DE  
PUB New or Withdrawn Publication  
F IP RIGHT GRANT

20200513 EPREG  
IEFG4D  
.....20200507  
REFERENCE TO A NATIONAL CODE  
+ IE: EUROPEAN PATENTS GRANTED DESIGNATING IRELAND  
IE  
ENP Entry into National Phase  
W OTHER

20200731 EPPGFP  
.....20200611  
+ ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED VIA POSTGRANT  
INFORMATION FROM NATIONAL OFFICE TO EPO]  
FR: 20200528  
PAYMENT YEAR: 3  
FEE Fee Payment  
U PAYMENT

20200916 EPREG  
NLMP  
.....20200827  
REFERENCE TO A NATIONAL CODE  
- NL: PATENT INVALID IN THE NETHERLANDS AS NO TRANSLATION HAS BEEN  
FILED  
NL: 20200408  
WTH Withdrawal, Refusal, etc.  
H IP RIGHT CESSATION

20200925 EPREG  
LTMG4D  
.....20201001  
REFERENCE TO A NATIONAL CODE  
- LT: INVALIDATED EUROPEAN PATENT  
LT  
WTH Withdrawal, Refusal, etc.  
H IP RIGHT CESSATION

20201030 EPPGFP  
.....20201001  
+ ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED VIA POSTGRANT  
INFORMATION FROM NATIONAL OFFICE TO EPO]  
DE: 20200609  
PAYMENT YEAR: 3  
FEE Fee Payment  
U PAYMENT

20201030 EPPG25  
.....20201112  
- LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION  
FROM NATIONAL OFFICE TO EPO]  
LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION  
OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT  
NL: 20200408  
LAP Lapse (Non-Payment of Fees)  
H IP RIGHT CESSATION  
.....20201112

INPAFAMDB

20201030 EPPG25 - LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]  
 LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT  
 FI: 20200408  
 LAP Lapse (Non-Payment of Fees)  
 H IP RIGHT CESSATION  
 .....20201112

20201030 EPPG25 - LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]  
 LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT  
 LT: 20200408  
 LAP Lapse (Non-Payment of Fees)  
 H IP RIGHT CESSATION  
 .....20201112

20201030 EPPG25 - LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]  
 LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT  
 IS: 20200808  
 LAP Lapse (Non-Payment of Fees)  
 H IP RIGHT CESSATION  
 .....20201112

20201030 EPPG25 - LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]  
 LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT  
 GR: 20200709  
 LAP Lapse (Non-Payment of Fees)  
 H IP RIGHT CESSATION  
 .....20201112

...  
 20201115 EPREG REFERENCE TO A NATIONAL CODE  
 ATMK05 - AT: DELETION ACC. TO PAR. 5 (WITHDRAWAL OF THE TRANSLATION OF THE EP PATENT)  
 AT 1254997 T  
 AT: 20200408  
 WTH Withdrawal, Refusal, etc.  
 H IP RIGHT CESSATION  
 .....20201126

20201130 EPPG25 - LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]  
 LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT  
 RS: 20200408  
 LAP Lapse (Non-Payment of Fees)  
 H IP RIGHT CESSATION  
 .....20201210

...

MEMBER 3

AN 65149450 INPAFAMDB ED 20191121 EW 201947 UP 20200528 UW 202052  
 DN 98031197  
 PI US 20190346249 A1 20191114  
 STI ALIVE

AN 65149450 INPAFAMDB ED 20201224 EW 202052 UP 20201224 UW 202052  
 DN 98031197  
 PI US 10866079 B2 20201215  
 STI ALIVE

LEGAL STATUS  
 20190514 USFEP FEE PAYMENT PROCEDURE  
 ENTITY STATUS SET TO UNDISCOUNTED (ORIGINAL EVENT CODE: BIG.);  
 ENTITY STATUS OF PATENT OWNER: LARGE ENTITY

FEE Fee Payment  
U PAYMENT  
.....20210121  
20190514 USAS ASSIGNMENT  
MELEXIS TECHNOLOGIES NV, BELGIUM  
ASSIGNMENT OF ASSIGNORS INTEREST;ASSIGNORS:MUNDER,  
GUNNAR;TEICHMANN, PETER;SIGNING DATES FROM 20190222 TO  
20190304;REEL/FRAME:049170/0031  
CHG Change of Owner, Inventor, Applicant  
R PARTY DATA CHANGE  
.....20191128  
20190701 USSTPP INFORMATION ON STATUS: PATENT APPLICATION AND GRANTING PROCEDURE IN  
GENERAL  
DOCKETED NEW CASE - READY FOR EXAMINATION  
EXA Examination, Search Report  
W OTHER  
.....20191219  
20200720 USSTPP INFORMATION ON STATUS: PATENT APPLICATION AND GRANTING PROCEDURE IN  
GENERAL  
RESPONSE TO EX PARTE QUAYLE ACTION ENTERED AND FORWARDED TO  
EXAMINER  
EXA Examination, Search Report  
W OTHER  
.....20200806  
20200910 USSTPP INFORMATION ON STATUS: PATENT APPLICATION AND GRANTING PROCEDURE IN  
GENERAL  
NOTICE OF ALLOWANCE MAILED -- APPLICATION RECEIVED IN OFFICE OF  
PUBLICATIONS  
EXA Examination, Search Report  
W OTHER  
.....20201001  
20201112 USSTPP INFORMATION ON STATUS: PATENT APPLICATION AND GRANTING PROCEDURE IN  
GENERAL  
PUBLICATIONS -- ISSUE FEE PAYMENT VERIFIED  
EXA Examination, Search Report  
W OTHER  
.....20201203  
FSTAT 1 priority, 3 applications, 6 publications (1 EPO simple family)  
3 countries, 52 legal status events

**DISPLAY MFAM.EP**

AN 65149450 INPAFAMDB ED 20191121 EW 201947 UP 20200528 UW 2020252  
DN 97947441  
TIDE POSITIONSERFASSUNGSVORRICHTUNG.  
TL German  
TIEN POSITION SENSING DEVICE.  
TL English  
TIFR DISPOSITIF DE DETECTION DE POSITION.  
TL French  
IN MUNDER, Gunnar; TEICHMANN, Peter  
INS MUNDER GUNNAR, DE; TEICHMANN PETER, DE  
PA Melexis Technologies NV  
PAS MELEXIS TECHNOLOGIES NV, BE  
DT Patent  
PI EP 3569986 A1 20191120 English  
DS R: AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK  
MT NL NO PL PT RO RS SE SI SK SM TR  
XS: BA ME  
PIT EPA1 APPLICATION PUBLISHED WITH SEARCH REPORT  
DAV 20191120 examined-printed-without-grant  
STA PRE-GRANT PUBLICATION  
XPD 20380514  
STI INDETERMINATE  
AI EP 2018-172083 A 20180514 EPA Patent application  
PRAI EP 2018-172083 A 20180514 EPA Patent application (Y,20191121)

## INPAFAMDB

IPCI G01D0005-20; G01D0001-16  
 CPC G01D0005-204; G01D0001-16; G01D0005-2013; G01B0007-003; G01D0005-2053  
 ABEN The present invention relates to a device for position sensing comprising sensing means arranged for producing at least two sensor signals (INO, IN1, IN2), and a signal construction unit (40) arranged for obtaining from said at least two sensor signals at least two time-synchronous signals, said signal construction unit comprising-selection means (21) for selecting in a serial way one of the at least two time-synchronous signals,- sampling means (15) for sampling the selected time-synchronous signal at given sampling instants,- storage means (34) for storing sampled data representing the selected time-synchronous signal and timing information indicating which of the given sampling instants were used to obtain the sampled data,- processing means (33) for determining at one of the given sampling instants a value for at least one of said time-synchronous signals that was not sampled at the one given sampling instant by performing an interpolation using data values of the at least one time synchronous signal stored in the storage means and obtained at another point in time than the one given sampling instant.  
 (EP3569986 A1).

AL English

AS National Office

FA ABEN; CPC; DAV; DS; DT; IN; INS; INO; IPCI; LA; LSDF; LSIC; LSPI; LSPMY; PA; PAS; PI; TIEN; TIFR; TIDE; XPD

AN 65149450 INPAFAMDB ED 20200409 EW 202015 UP 20200528 UW 202022

DN 97947441

TIDE POSITIONSERFASSUNGSVORRICHTUNG.

TL German

TIEN POSITION SENSING DEVICE.

TL English

TIFR DISPOSITIF DE DETECTION DE POSITION.

TL French

IN MUNDER, Gunnar; TEICHMANN, Peter

INS MUNDER GUNNAR, DE; TEICHMANN PETER, DE

PA Melexis Technologies NV

PAS MELEXIS TECHNOLOGIES NV, BE

DT Patent

PI EP 3569986 B1 20200408 English

DS R: AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU

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

PIT EPB1 PATENT SPECIFICATION

DAV 20200408 printed-with-grant

STA GRANTED

XPD 20380514

STI INDETERMINATE

AI EP 2018-172083 A 20180514 EPA Patent application

PRAI EP 2018-172083 A 20180514 EPA Patent application (Y,20191121)

IPCI G01D0005-20; G01D0001-16

CPC G01D0005-204; G01D0001-16; G01D0005-2013; G01B0007-003; G01D0005-2053

FA CPC; DAV; DS; DT; IN; INS; INO; IPCI; LA; PA; PAS; PI; TIEN; TIFR; TIDE; XPD

## LEGAL STATUS

AN 65149450 INPAFAMDB

20191120 EPAX + REQUEST FOR EXTENSION OF THE EUROPEAN PATENT

BA ME

MIS Miscellaneous or Ambiguous

W OTHER

.....20191128

20191120 EPAK + DESIGNATED CONTRACTING STATES

EP A1

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT

LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

MIS Miscellaneous or Ambiguous

W OTHER

.....20191128

20191120 EP17P + REQUEST FOR EXAMINATION FILED

20181030

EXA Examination, Search Report

D SEARCH AND EXAMINATION

20200109 EPGRAP .....20191128  
+ DESPATCH OF COMMUNICATION OF INTENTION TO GRANT A PATENT  
ORIGINAL CODE: EPIDOSNIGR1  
EXA Examination, Search Report  
D SEARCH AND EXAMINATION

20200115 EPRIC1 .....20201022  
INFORMATION PROVIDED ON IPC CODE ASSIGNED BEFORE GRANT  
G01D0001/16  
CLA Change, Removal or Addition of Classifications  
Y CORRECTION AND DELETION OF EVENT INFORMATION

20200115 EPRIC1 .....20200123  
INFORMATION PROVIDED ON IPC CODE ASSIGNED BEFORE GRANT  
G01D0005/20  
CLA Change, Removal or Addition of Classifications  
Y CORRECTION AND DELETION OF EVENT INFORMATION

20200205 EPINTG .....20200123  
+ INTENTION TO GRANT ANNOUNCED  
20200110  
EXA Examination, Search Report  
D SEARCH AND EXAMINATION

20200224 EPGRAS .....20200213  
+ GRANT FEE PAID  
ORIGINAL CODE: EPIDOSNIGR3  
FEE Fee Payment  
U PAYMENT

20200306 EPGRAA .....20201022  
+ (EXPECTED) GRANT  
ORIGINAL CODE: 0009210  
MIS Miscellaneous or Ambiguous  
F IP RIGHT GRANT

20200408 EPAK .....20201022  
+ DESIGNATED CONTRACTING STATES  
EP B1  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT  
LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR  
MIS Miscellaneous or Ambiguous  
W OTHER

20200415 EPREG .....20200416  
ATREF ATREF  
+ AT: REFERENCE TO A NATIONAL CODE  
+ AT: REFERENCE TO AT NUMBER (EP PATENT ENTERS AUSTRIAN NATIONAL  
PHASE)  
AT 1254997 T  
AT: 20200415  
ENP Entry into National Phase  
W OTHER

20200415 EPREG .....20200423  
CHEP CHEP  
+ CH: EUROPEAN PATENT TAKES EFFECT AS A NATIONAL PATENT IN CH/LI  
CH  
ENP Entry into National Phase  
W OTHER

20200430 EPREG .....20200423  
DER096 DER096  
+ DE: DPMA PUBLICATION OF MENTIONED EP PATENT GRANT  
DE 602018003535  
DE  
PUB New or Withdrawn Publication  
F IP RIGHT GRANT

20200513 EPREG .....20200507  
IEFG4D IEFG4D  
+ IE: EUROPEAN PATENTS GRANTED DESIGNATING IRELAND  
IE  
ENP Entry into National Phase  
W OTHER

20200731 EPPGFP .....20200611  
+ ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED VIA POSTGRANT  
INFORMATION FROM NATIONAL OFFICE TO EPO]

## INPAFAMDB

FR: 20200528  
 PAYMENT YEAR: 3  
 FEE Fee Payment  
 U PAYMENT  
 .....20200827

20200916 EPREG  
 NLMP REFERENCE TO A NATIONAL CODE  
 - NL: PATENT INVALID IN THE NETHERLANDS AS NO TRANSLATION HAS BEEN  
 FILED  
 NL: 20200408  
 WTH Withdrawal, Refusal, etc.  
 H IP RIGHT CESSATION  
 .....20201001

20200925 EPREG  
 LTMG4D REFERENCE TO A NATIONAL CODE  
 - LT: INVALIDATED EUROPEAN PATENT  
 LT  
 WTH Withdrawal, Refusal, etc.  
 H IP RIGHT CESSATION  
 .....20201001

20201030 EPPGFP + ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED VIA POSTGRANT  
 INFORMATION FROM NATIONAL OFFICE TO EPO]  
 DE: 20200609  
 PAYMENT YEAR: 3  
 FEE Fee Payment  
 U PAYMENT  
 .....20201112

20201030 EPPG25 - LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION  
 FROM NATIONAL OFFICE TO EPO]  
 LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION  
 OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT  
 NL: 20200408  
 LAP Lapse (Non-Payment of Fees)  
 H IP RIGHT CESSATION  
 .....20201112

...

.....20201112

20201115 EPREG  
 ATMK05 REFERENCE TO A NATIONAL CODE  
 - AT: DELETION ACC. TO PAR. 5 (WITHDRAWAL OF THE TRANSLATION OF THE  
 EP PATENT)  
 AT 1254997 T  
 AT: 20200408  
 WTH Withdrawal, Refusal, etc.  
 H IP RIGHT CESSATION  
 .....20201126

20201130 EPPG25 - LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION  
 FROM NATIONAL OFFICE TO EPO]  
 LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION  
 OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT  
 RS: 20200408  
 LAP Lapse (Non-Payment of Fees)  
 H IP RIGHT CESSATION  
 .....20201210

...

FSTAT 1 priority, 3 applications, 6 publications (1 EPO simple family)  
 3 countries, 52 legal status events

**In North America**  
 CAS  
 STN North America  
 P.O. Box 3012  
 Columbus, Ohio 43210-0012 U.S.A.

CAS Customer Center:  
 Phone: 800-753-4227 (North America)  
 614-447-3700 (worldwide)  
 Fax: 614-447-3751  
 Email: help@cas.org  
 Internet: www.cas.org

**In Europe**  
 FIZ Karlsruhe  
 STN Europe  
 P.O. Box 2465  
 76012 Karlsruhe  
 Germany  
 Phone: +49-7247-808-555  
 Fax: +49-7247-808-259  
 Email: helpdesk@fiz-karlsruhe.de  
 Internet: www.stn-international.com

**In Japan**  
 JAICI (Japan Association for  
 International Chemical Information)  
 STN Japan  
 Nakai Building  
 6-25-4 Honkomagome, Bunkyo-ku  
 Tokyo 113-0021, Japan  
 Phone: +81-3-5978-3601 (Technical Service)  
 +81-3-5978-3621 (Customer Service)  
 Fax: +81-3-5978-3600  
 Email: support@jaici.or.jp (Technical Service)  
 customer@jaici.or.jp (Customer Service)  
 Internet: www.jaici.or.jp