

Subject Coverage	All areas of science and technology, i.e., all classes of the International Patent Classification	
File Type	Bibliographic	
Features	Thesauri Cooperative Patent Classification (/CPC), International Patent Classification (/IPC), F-Term Classification (/FTRM), and FI Classification (/FCL, /JPC) Alerts (SDIs) Monthly, weekly, or with each update (2 updates per week) (every update is the default) CAS Registry Number® Identifiers ☐ SLART ☒ Register Links ☒ Keep & Share ☒ Structures ☐	
Record Content	• Bibliographic and family data of patent documents, utility models, and design patents of 105 patent-issuing organizations including the European Patent Office (EPO) and the World Intellectual Property Organization (WIPO). • Legal status data of 98 patent-issuing organizations (54 countries + from 44 countries of the national phases PCT/EP). Two classification systems for over 4,300 legal event codes are available; see HELP LEGSTAT for details. • Indexes are based on the patent application, where in INPAFAMB the indexes are based on the patent families. The accession number AN in INPADOCDB is the document number DN from INPAFAMB. • Abstracts are provided for more than 95 million records with more than 87 million abstracts in English (01/2026) • Patent status indicators are provided for all patent authorities; see HELP STATUS for details. • Calculated expiration dates are provided for granted IP rights for all patent authorities except WO and ID. See HELP XPD for details. • EP unitary patents are searchable in bibliographic and legal status search fields. See HELP UNITARYPATENT for details. • Note: The accession number can change due to corrections/updates of patent relevant numbers and codes.	
File Size	• More than 129 million records (applications) including patent families with about 166 million publications in more than 89 million international patent families from 1782 to the present (01/2026) • More than 500 million legal status data in more than 93 million records from 1967 to the present (01/2026)	
Coverage	1782 - present	
Updates	Updated twice a week; per week about 100,000 - 250,000 new records, 200,000 - 1,000,000 updated records and 400,000 - 1,000,000 records with new legal status data.	
Languages	English, French, German, Spanish, Portuguese, Chinese, Japanese, Korean, Russian	
Database Producer	European Patent Office Vienna Sub Office P.O. Box 90 Austria Phone: +43 1 52126-0 Fax: +43 1 52126-5491 Email: patentdata@epo.org Copyright Holder	FIZ Karlsruhe - Leibniz-Institute for Information Infrastructure Hermann-von-Helmholtz-Platz 1 76344 Eggenstein-Leopoldshafen Germany Phone: +49 7247 808-0 Email: contact@fiz-karlsruhe.de Copyright Holder

-
- | | |
|----------------|---|
| Sources | <ul style="list-style-type: none">• EPO-Patent Information Resource based on the data supplied by the patent offices (INPADOC/DOCDB Service)• INPADOC Legal Status Service |
|----------------|---|
-

- | | |
|------------------|--|
| User Aids | <ul style="list-style-type: none">• Online Helps (HELP DIRECTORY lists all help messages available)• STNGUIDE |
|------------------|--|
-

- | | |
|-----------------|--|
| Clusters | <ul style="list-style-type: none">• ALLBIB• AUTHORS• CORPSOURCE• HPATENTS• PATENTS <p>STN Database Cluster information</p> |
|-----------------|--|
-

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? S (DRILLING (W) PROCESS)/AB	AB, ABDE, ABFR, ABES, ABOL, ABS, TI
Abstract* (ABDE, ABEN, ABES, ABFR, ABOL)	/AB		ABDE, ABEN, ABES, ABFR, ABOL
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	/AN	S 98540005/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 3/ACNT	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 2025-2025/XPY	XPY
Cooperative Patent Classification	/CPC	S D03D0015-0011/CPC	CPC
Country Number Count (1)	/CCNT (or /CYC)	S 3/CCNT	FSTAT
CPC, Action Date (1)	/CPC.ACD	S 20130101/CPC.ACD	CPC.TAB
CPC, Codes of a Combination Set	/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
Data in Force (1,3)	/DF	S 20000127/DF	DF
Designated States	/DS	S W JP/DS	DS
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 20200123 - 20200130/EDPR	PRAI
Entry Week (INPADOC week) (1)	/EW	S 202001/EW	EW
Family Number (INPAFAMDB AN)	/FN	S 12300004/FN	FN
Field Availability	/FA	S L7 AND DS/FA	FA
Filing Country for PCT Application	/AC.WO	S FR/AC.WO	AI
Filing Country for PCT Priorities (WIPO code and text)	/PRC.WO	S DE/PRC.WO	PRAI
Filing Details	/FDT	S DED1/FDT	FDT
Inventor	/IN (or /AU)	S NICKOLA RICHARD?/IN	IN
Inventor Address	/INA	S HEIDELBERG/INA	INA
Inventor, Country (WIPO code and text)	/IN.CNY	S GB/IN.CNY	INS

Bibliographic Search Fields (cont'd)

Search Field Name	Search Code	Search Examples	Display Codes
Inventor INPADOC Standard	/INS	S AGARWAL S?/INS	INS
International Patent Classification, Version 1-7 (ICM, ICS, ICA, ICI)	/IC	S C07H019-16/IC	IC
International Patent Classification, Version 1-8 (IPCI, IPCR, ICM, ICS, ICA, ICI)	/IPC	S H05B0006-36+NT/IPC S H05B0006-36-H05B0006-44/IPC	IC, IPCI, IPCR
IPC, Action Date (1)	/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 C23C001-08/ICM	ICM
IPC, Secondary, Version 1-7	/ICS	S C12P019-40/ICS	ICS
IPC, Initial	/IPCI	S A61K0000-00/IPCI	IPCI
IPC, Reclassified	/IPCR	S A61N0005-067/IPCR	IPCR
IPC, Version from IPC	/IPC.VER	S 200601/IPC.VER	IPC.TAB
Japanese Patent Classification (FI-Terms)	/FCL (or /JPC)	S A01B0001-24 B/FCL	FCL
Japanese Patent Classification (F-Terms)	/FTRM (or FTERM, 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 (4)	/PAS	S INLAND STEEL CO?/PAS S (BROWN(S)TOBACCO)/PAS	PAS
Patent Assignee, Country (WIPO code and text)	/PA.CNY	S GB/PA.CNY	PAS
Patent Country	/PC	S DE/PC AND IBM/PAS AND 1988/PY	PI
Patent Information Type	/PIT	S ARA1/PIT	PIT
Patent Kind Code	/PK	S ZWA1/PK	PI
Patent Number (2)	/PN	S FI9902020/PN	PI
Patent Number Count (1)	/PCNT (or /PNC)	S 4/PCNT	FSTAT
Patent Number/Kind Code	/PNK	S WO2009006253A2/PNK	PNK
Patent Number Original	/PNO	S KR300392615S/PNO	PNO
Patent Stage	/STA	S GRANTED/STA AND LASER/TI	STA
Patent Term Adjustment (1)	/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 Date (1)	/PRD (or /PD.D)	S JP/PRC AND 19880101-19880331/PRD	PRAI
Priority Date, First (1)	/PRDF	S MARCH 2009/PRDF	PRAI
Priority Kind Code	/PRK	S DEA/PRK	PRAI
Priority Kind Text	/PRAIT	S ARA PATENT APPLICATION/PRAIT	PRAIT
Priority Number (1)	/PRN	S US1990-184420/PRN	PRAI
Priority Number Count (1)	/PRCNT	S 10/PRCNT	FSTAT
Priority Number Original	/PRNO	S KRD1997055047/PRNO	PRNO
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 ID (EPO)	/PUBID	S 23409/PUBID	PUBID
Publication Year (1)	/PY	S 1999/PY	PI

Bibliographic Search Fields (cont'd)

Search Field Name	Search Code	Search Examples	Display Codes
Simple Family Number (EPO)	/SFN	S 12300006/SFN	SFN
Simple Family Number Count (EPO) (1)	/SFCNT	S 5/SFCNT	FSTAT
Patent Status Established Date (1)	/STED	S 20210806/STEDI	STED
Patent Status Indicator	/STI	S DEAD/STI or S D/ST	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	TL
Title (TIDE, TIEN, TIES, TIFR, TIOL)*	/TI	S ENGLISH/TL 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 (all updates in /UPM, /UPLS, /UPFC) (1)	/UPM	S L1 AND 20200702/UPM	not displayed
Ultimate Owner (4)	/UO	S BASF/UO	UO
Ultimate Owner Standardized (4)	/UOS	S BASF/UOS	UOS
Update Date Classifications (1)	/UPCC	S L1 AND UPCC> 20200702	UPALL
Update Date for combined or split Patent Family (1)	/UPFC	S UPFC=OCT 2019	UPALL
Update Date New Patent Family Record (1)	/UPFD	S 20200702/UPFD	UPALL
Update Date New Publication and/or Legal Status Changes of the family (all updates in /UPFB, /UPFL) (1)	/UPFE	S 20200702/UPFE	UPALL
Update Date of Bibliography (1)	/UPBB	S L1 AND UPBB> 20200702	UPALL
Update Date Patent Family (all updates in /UPFB, /UPFC, /UPFL) (1)	/UPFA	S 20200702/UPFA	UPALL
Update Date Patent Family Legal Status (1)	/UPFL	S 20200702/UPFL	UPALL
Update Date Patent Family Publication Level (1)	/UPFP	S 20200702/UPFP	UPALL
Update Date Patent Family Bibliographic (1)	/UPFB	S 20200702/UPFB AND L7	UPALL
Update Week (INPADOC Week) (1)	/UW	S UW= 201806 AND L3	UW

(1) Numeric search field that may be searched using numeric operators or ranges.**(2)** Either STN 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 (1)	/EDLS	S EDLS=FEB 2019	not displayed
Legal Status Basic Index (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 Code Text	/LSTX	S CORRECTION/LSTX	LS
Legal Status Country (WIPO code and text)	/LSCY	S UNITED KINGDOM/LSCY	LS
Legal Status Date in Force (1)	/LSDF	S LSDF=20050109	LS
Legal Status Date INPADOC GAZETTE (1)	/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 AND L3	LS
Legal Status IPC	/LSIC	S A01B0001/24 /LSIC	LS
Legal Status Licensee	/LSLI	S BAYER/LSLI	LS
Legal Status Number Count (1)	/LSCNT	S 10-20/LSCNT	LS
Legal Status Patent Assignee (2)	/LSPA	S (MAN CERAMICS)/LSPA	LS
Legal Status Patent Inventor	/LSIN	S MAYER, BERND/LSIN S (MAYER(S)BERND)/LSIN	LS
Legal Status Patent Opponent	/LSOP	S SIEMENS AG/LSOP	LS
Legal Status Publication Country (WIPO code and text)	/LSPC	S CA/LSPC S CANADA/LSPC	LS
Legal Status Publication Date (1)	/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 (1)	/LSPY	S 1999-2000/LSPY	LS
Legal Status Represent./Agent	/LSAG	S (LORENZ AND PHILIPPS)/LSAG	LS
Legal Status SPC Number	/LSSPC	S SPC/GB00/007/LSSPC	LS
Legal Status SPC, Expiry Date (1)	/LSSPC.XD	S LSSPC.XD>2025	LS
Legal Status SPC, Extension Date (1)	/LSSPC.EX	S 20230930 /LSSPC.EX	LS
Legal Status SPC, Filing Date (1)	/LSSPC.FD	S 20190102- 20190116/LSSPC.FD	LS
Legal Status, Payment Year (1)	/LSPMY	S 18/LSPMY	LS
Update Legal Status (1)	/UPLS	S 20200827 8/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 cross-file and multi-file 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	/INSS	/IN, /INS, /LSIN	S MEIER/INSS	IN, INS, LS
Patent Assignee Group	/PASS	/PA, /PAS, /LSPA, /UO	S MEIER/PASS	PA, PAS, LS, UO
Patent Number Group (1)	/PATS	/PN, /PNO, /LSPN	S WO2019003340/PATS	PI, PNO, LSPC
Patent Countries	/PCS	/DS, /PC	S BE/PCS	PI, DS

(1) 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 1-8, 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) ALL BRO (MAN) BT BTn	Advanced Level Codes for the Core Level IPC Code All Associated Terms (BT, SELF, NT, RT) Complete Class Broader Term (SELF, BT) Broader Term (SELF, BT) up to the next n levels (n =1, 2, ...)	E A61K0066-02+ADVANCED/IPC E C01C003-00+ALL/IPC E C01C+BRO/IPC E C01F001-00+BT/IPC E C01F001-21+BT2/IPC
CORE (COR) ED HIE	Core Codes for the Advanced Level IPC Code Complete title of the SELF term and IPC manual Hierarchy Term (Broader and Narrower Term) (BT, SELF, NT)	E G08C0019-22+CORE/IPC E C01F001-00+ED/IPC E C011003-00+HIE/IPC
INDEX KT NEXT NT NTn	Complete title of the SELF term Keyword Term (catchwords) (SELF, KT) Next Classification Narrower Terms (SELF, NT) Narrower Terms (SELF, NT) down to the next n levels (n =1, 2,)	E C01F001-00+INDEX/IPC E CYANOGEN+KT/IPC E C01C001-00+NEXT5/IPC E C01C+NT/IPC E C01C+NT3/IPC
PREV PREV(n) RT (SIB) TI	Previous Code within the same class (SELF, PREV) Previous n classifications within the same class Related Terms (SELF, RT) Complete Title of the SELF Term and Broader Terms (BT, SELF)	E C01C001-12+PREV/IPC E C01C001-12+PREV10/IPC E C01C003-20+RT/IPC E C01F001-00+TI/IPC

CPC Thesaurus

This 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.

F-Term (/FTRM) Thesaurus

This thesaurus is available in the F-term classification field (/FTRM) and synonym fields (/FTRM, /FTCLA, /JPCLA) that contains patent classification from the Japanese Patent Office. All relationship codes can be used with both the EXPAND and SEARCH commands.

Relationship Code	Content	Search Examples
ALL AUTO (1) BT DEF HIE KT	All associated terms with related FI-terms Automatic relationship (all hierarchy terms) Broader term with related FI-term Definition with related FI-term Hierarchy terms (all broader and narrower terms) Keyword term	E 2B002/AA05+ALL/FTRM E 2B002/AA05+BT+AUTO/FTRM E 2B002/AA05 /FTRM E 2B002/BA13+DEF/FTRM E 2B002/AA05+HIE/FTRM E PLYWOODS+KT/FTRM E E7+KT
NT RFI TI	Narrower term with related FI-term Related FI-term Complete title of the SELF term and broader terms with related FI-term	E 2B002/AA05+NT/FTRM E 2B002/AA09+RFI/FTRM E 2B002/AA09+TI/FTRM

(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.

FI Thesaurus

The following Relationship Codes may be used with the EXPAND and SEARCH commands in the FI Classification (/FCL, /JPC) field:

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/FCL E G01J003-443+AUTO/FCL E G01J0003-443+BT/FCL E SCRAPER BIASING MEANS+CODE/FCL
DEF HIE	Definition (SELF, DEF) Hierarchy terms (all broader and narrower terms) (BT, SELF, DEF, NT)	E B65G0045-16+DEF/FCL E A01B0001+HIE/FCL
NOTE KT MAX NEXT NEXT(n) NT TI	Scope Notes Keyword terms (SELF, KT) All associated terms Next classification within the same class (SELF, NEXT) Next n classification within the same class Narrower terms Complete Title of the SELF Term and Broader Terms (BT, SELF)	E B23D+NOTE/FCL E LASER+KT/FCL E G01J0003-44B+MAX/FCL E A01B0001-24+NEXT/FCL E A01B0001-24+NEXT3/FCL E G05B0001-04+NT/FCL E G05B0001-03+TI/FCL

(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 formats may be used to display or print answers. Multiple codes must be separated by spaces or commas, e.g., D L1 1-5 TI PI. The fields are displayed or printed in the order requested.

Most custom display fields provide the deduplicated content of all publications of a record (national family), e.g., D PI displays all publication numbers.

For TI, IN, INS, PA, and PAS the qualifier .M has to be used to display the content for all publications of a record. For the other custom display fields the use of the qualifier .M is not valid.

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

Format	Content	Examples
AB	Abstract (all languages)	D AB
ABDE	Abstract (German)	D ABDE
ABEN	Abstract (English)	D ABEN
ABES	Abstract (Spanish)	D ABES
ABFR	Abstract (French)	D ABFR
ABO	Abstract Original	D ABO
ABOL	Abstract (other language)	D ABOL
AI (AP) (2)	Application Information	D AI
AIT	Application Kind Code Text	D AIT
AN	Accession Number	D AN
APO	Application Number Original	D APO
APPS	Application Number Group	D APPS
AS	Abstract Source	D AS
CPC	Cooperative Patent Classification	D CPC
DAV	Data Availability	D DAV
DF	Date in Force	D DF
DS	Designated States	D DS
DT (TC)	Document Type	D DT
ED	Entry Date	D ED
EDF	Entry Date new Patent Family	D EDF
EDP	Entry Date Patent	D EDP
EDPR	Entry Date Priority	D EDPR
EW	Entry Week	D EW

DISPLAY and PRINT Formats (cont'd)

Format	Content	Examples
FA	Field Availability	D FA
FCL (JPC)	Japanese Patent Classification (FI-Terms)	D FCL
FDT	Filing Details	D FDT
FN	Family Number (INPAFAMDB AN)	D FN
FTRM	Japanese Patent Classification (F-Terms)	D FTRM
IC	International Patent Classification (ICM, ICS)	D IC
ICA	IPC, Additional (supplementary)	D ICA
ICI	IPC, Index (complementary)	D ICI
ICM	IPC, Main	D ICM
ICS	IPC, Secondary	D ICS
IN (AU) (1)	Inventor	D IN
IN.CNY	Inventor, Country	D INS
INA	Inventor Address	D INA
INO	Inventor, Original	D INO
INS (1)	Inventor INPADOC Standard	D INS
IPCI	IPC, Initial	D IPCI
IPCR	IPC, Reclassified	D IPCR
LA	Language	D LA
LAF	Language of Filing	D LAF
PA (CS) (1)	Patent Assignee	D PA
PAA	Patent Assignee Address	D PAA
PA.CNY	Patent Assignee, Country	D PAS
PAO	Patent Assignee Original	D PAO
PAS (1)	Patent Assignee INPADOC Standard	D PAS
PI (PN, PATS) (2)	Patent Information	D PI
PIT	Patent Information Type	D PIT
PNK	Patent Number/Kind Code	D PNK
PNO	Patent Number Original	D PNO
PRAI (PRN) (2)	Priority Information	D PRAI
PRAIT	Priority Kind Text	D PRAIT
PRNO	Priority Number, Original	D PRNO
PTA	Patent Term Adjustment	D PTA
PUBID	Publication ID	D PUBID
SFN	Simple Family Number (EPO)	D SFN
STA	Patent Stage	D STA
STED	Patent Status Established Date	D STED
STI	Patent Status Indicator	D STI
TI (1)	Title (all languages)	D TI
TIDE	Title (German)	D TIDE
TIEN	Title (English)	D TIEN
TIES	Title (Spanish)	D TIES
TIFR	Title (French)	D TIFR
TIO	Title, Original	D TIO
TIOL	Title (other language)	D TIOL
TL	Title Language	D TL
UO	Ultimate Owner	D UO
UOS	Ultimate Owner Standardized	D UOS
UP	Update Date	D UP
UW	Update Week (INPADOC Week)	D UW
XPD	Calculated Expiration Date	D XPD
XPY	Calculated Expiration Year	D XPY
ABS	AS, AL, ABDE, ABEN, ABES, ABFR, ABOL	D ABS
ALL (2)	BIB, IND, ABS, FA	D ALL
ALLO (2)	ALL, PNO, APO, PRNO, FSTAT plus original data in UTF-8 characters	D ALLO
IALL (2)	ALL, indented with text labels	D IALL
BIB (2)	AN, ED, EW, UP, UW, FN, UPFC, TIDE, TIEN, TIES, TIFR, TIOL, TIO, TL, IN (inc. INA), INO, INS, PA (inc. PAA), PAO, PAS, UO, UOS, DT, LA, LAF, PI, DS, PIT, DAV, STA, DF, XPD (inc. PTA), STI, AI (inc. AIT), PRAI (inc. PRAIT) (The default format is BIB.M)	D BIB
IBIB (2)	BIB, indented with text labels	D IBIB

DISPLAY and PRINT Formats (cont'd)

Format	Content	Examples
BIBLS BRIEF	BIB plus legal status information AN, FN, TIDE, TIEN, TIES, TIFR, TIOL, TIO, INS, INO, PAS, PAO, UO, UOS, IPCI, IPCR, CPC, FTRM, FCL, PI, AI, PRAI, abstracts	D BIBLS D BRIEF
APPS (2) CODE CPC.TAB FSTAT IC IND IPC	Application Number Group (AI, PRAI) AN, EDF, UPFB, FN, UPFC, IND CPC, CPC.KW, CPC.ACD, CPC.VER, in tabular format All counted numbers: PRCNT, ACNT, PCNT, SFCNT, CCNT, LSCNT International Patent Classification, Version 1-7 (ICM, ICS, ICI, ICA) AN, ED, EW, UP, UW, IPC, CPC, FTRM, FCL International Patent Classification, Version 1-8 (ICM, ICS, ICA, ICI, IPCR, IPCI)	D APPS D CODE D CPC.TAB D FSTAT D IC D IND D IPC
IPC.TAB LS LS2 LSUP MAX (2) IMAX (2) MAXO (2) PATS (2) PI.PDF	IPC, IPC.KW, IPC.ACD, IPC.VER, in tabular display AN, UPLS, Legal Status Legal Status, detailed version with display headers Last LS Update ALL plus SFN, PUBID, DOCID, LS MAX, indented with text labels MAX, PNO, APO, PRNO plus original data in UTF-8 characters Patent Number Group (PI) National family PI information plus hyperlinks to the original documents (pdf) in Espacenet	D IPC.TAB D LS D LS2 D LSUP D MAX D IMAX D MAXO D PATS D PI.PDF
PILS SCAN (3) STD (2) TIPI UPALL	PI, AN plus legal status information TI latest publication (random display without answer number) BIB, IND TI, PI, FSTAT Table of update dates (AN, EDF, UPFC, UPFP, UPFB, UPFD, UPFL, FN, UP, ED, EDP, UPBB, UPCC, STED)	D PILS D SCAN D STD D TIPI D UPALL
TRIAL (TRI, FREE, SAMPLE, SAM) HIT KWIC OCC	TI, IPC, CPC, FTRM, FCL Hit term(s) and field(s) Up to 50 words before and after hit term(s) (KeyWord-In-Context) Number of occurrences of hit term(s) and field(s) in which they occur	D TRIAL D HIT D KWIC D OCC

(1) The qualifier .M may be used to display the content for all publications of a record.

(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.

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

FAMILY DISPLAY and PRINT Formats

Format	Content	Examples
TIPI.F PILS.F (1, 4) BIBLS.F (1) CFAM (1) CFAM2 (1) DFAM (1, 2) EFAM (1) FAM (1) FAMLS (1)	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 AN, table of patent family information (PI, AI, PRAI) and relationships, FSTAT Comprises the family table CFAM2 plus a list of all legal status entries, sorted by legal status date LSD	D TIPI.F D PILS.F D BIBLS.F D CFAM D CFAM2 D DFAM D EFAM D FAM D FAMLS
FAM2 (1) FFAM (1) FFAM.PC (1, 3) FSTAT IFAM (1)	AN, table of patent family information, another order STD + LS for each member of the family FFAM for a specified country only All count numbers with PRCNT, ACNT, PCNT, SFCNT, CCNT, LSCNT Combines indented FAM and IMAX.F, ordered alphabetically by patent offices with the respective country code and name as header	D FAM2 D FFAM D FFAM.PC D FSTAT D IFAM
IFAM2 LFAM (1)	IFAM without abstract and classification AN, FN, PI, STI plus legal status information for all members of a patent family	D IFAM2 D LFAM

FAMILY DISPLAY and PRINT Formats (cont'd)

Format	Content	Examples
MFAM (1) MFAM.PC (1, 3) SFAM (1)	MAX for each family member MFAM for a specified country only Display of the EPO 'simple patent family' (SFN) within the INPADOC patent family table	D MFAM D MFAM.PC D SFAM

- (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) SET LINE 100 is recommended.
- (3) PC = all patent countries.
- (4) In format PILS legal status is displayed without the information PRI, APP, and PUB.

FAMILY DISPLAY and PRINT Formats – Every Update SDI

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

FAMILY DISPLAY and PRINT Formats – Weekly SDI

Format	Content	Examples
FFAMED1 FFAMED1.PC FFAMUP1 FFAMUP1.PC IFAMED1 IFAMUP1 LFAMUP1 LFAMUP1.PC	STD for new publications and/or LSUP for each updated family FFAMED for a specific country only STD + LS for each updated family FFAMUP for a specific country only Indented FFAMED plus patent family table Indented FFAMUP plus patent family table AN, PI, LSUP for all updated members of a patent family LFAMUP for a specific country only	D FFAMED1 D FFAMED1.PC D FFAMUP1 D FFAMUP1.PC D IFAMED1 D IFAMUP1 D LFAMUP1 D LFAMUP1.PC

FAMILY DISPLAY and PRINT Formats – Monthly SDI

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

Sorting within the PATENT FAMILY DISPLAY Formats

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

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).

The SELECT/ANALYZE command extracts terms from all publication levels.

Field Name	Field Code	ANALYZE/ SELECT (1)	SORT
Abstract	AB	Y	Y
Abstract (English)	ABEN	Y	Y
Abstract (French)	ABFR	Y	Y
Abstract (German)	ABDE	Y	Y
Abstract (Spanish)	ABES	Y	Y
Abstract (other language)	ABOL	Y	Y
Abstract Language	AL	Y	Y
Accession Number	AN	Y	Y
Application Country	AC	Y	Y
Application Date	AD	Y	Y
Application Kind Code	AK	Y	Y
Application Kind Code Text	AIT	Y	Y
Application Number	AP (AI)	Y (2)	Y
Application Number Count	ACNT	Y	Y
Application Number Group	APPS	Y (2, 3)	N
Application Number, Original	APO	Y	N
Application Year	AY	Y	Y
Calculated Expiration Day	XPD	Y	Y
Calculated Expiration Year	XPY	Y	Y
Cooperative Patent Classification	CPC	Y	N
Country Number Count	CCNT	Y	Y
Date in Force	DF	Y	Y
Designated State	DS	Y	N
Document Type	DT (TC)	Y	Y
Entry Date	ED	Y	N
Entry Date new Patent Family	EDF	Y	N
Entry Date Patent	EDP	Y	N
Entry Week	EW	Y	N
EPO Simple Family Member Count	SFCNT	Y	Y
Filing Country for PCT Applications	AC.WO	Y	Y
Filing Country for PCT Priorities	PRC.WO	N	Y
Filing Details	FDT	Y	N
INPAFAMDB Family Number	FN	Y	N
International Patent Classification	IC	Y	N
International Patent Classification	IPC	Y	N
Inventor	IN (AU)	Y	Y
Inventor, Country	IN.CNY	Y	Y
Inventor Address	INA	Y	Y
Inventor INPADOC Standard	INS	Y	Y
IPC, Additional (supplementary)	ICA	Y	Y
IPC, Index (complementary)	ICI	Y	Y
IPC First	IPCF	Y	Y
IPC Initial	IPCI	Y (4)	Y
IPC Main	ICM	Y	Y
IPC Reclassified	IPCR	Y (4)	Y
IPC Secondary	ICS	Y	Y
Japanese Patent Classification (F-Terms)	FTRM	Y	N
Japanese Patent Classification (FI-Terms)	FCL	Y	N

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

Field Name	Field Code	ANALYZE/ SELECT (1)	SORT
Language	LA	Y	Y
Language of Filing	LAF	Y	Y
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
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	Y
Patent Assignee Address	PAA	Y	Y
Patent Assignee INPADOC Standard	PAS	Y	Y
Patent Assignee, Country	PA.CNY	Y	Y
Patent Country	PC	Y	Y
Patent Information Type	PIT	Y	Y
Patent Kind Code	PK	Y	Y
Patent Number	PN (PI)	Y (2)	Y
Patent Number/Kind Code	PNK	Y	Y
Patent Number Group	PATS	Y (2, 5)	Y
Patent Number Original	PNO	Y	N
Patent Stage	STA	Y	N
Patent Term Adjustment	PTA	Y	Y
Priority Country	PRC	Y	Y
Priority Country First	PRCF	Y	Y
Priority Country, First of PCT Priorities	PRCF.WO	Y	N
Priority Date	PRD	Y	Y
Priority Date, First	PRDF	Y	Y
Priority Kind Code	PRK	Y	Y
Priority Kind Text	PRAIT	Y	Y
Priority Number	PRN (PRAI)	Y (2)	Y
Priority Number Original	PRNO	Y	N
Priority Year	PRY	Y	Y
Priority Year First	PRYF	Y (6)	Y
Publication Date	PD	Y	Y
Publication Year	PY	Y	Y
Patent Status Established Date	STED	Y	Y
Patent Status Indicator	STI	Y	Y
Title	TI	Y (default)	Y
Title (German)	TIDE	Y	Y
Title (English)	TIEN	Y	Y
Title (French)	TIFR	Y	Y
Title (Spanish)	TIES	Y	Y
Title (other language)	TIOL	Y	Y
Title Language	TL	Y	Y

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

Field Name	Field Code	ANALYZE/ SELECT (1)	SORT
Ultimate Owner	UO	Y	Y
Ultimate Owner Standardized	UOS	Y	Y
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 T1.
 (2) SELECTed and SORTed application, priority and patent numbers are in the format set by the Messenger SET PATENT command, either DERWENT or STN.
 (3) Selects or analyzes AP, APO, PRN, PRNO, and appends /APPS to the terms created by SELECT.
 (4) Appends /IPC to the terms created by SELECT.
 (5) Selects or analyzes PN, PNO, LSPN with /PATs appended to the terms created by SELECT.
 (6) SELECT or ANALYZE HIT are not valid with this field.

Update Codes (for SDI also)**Update codes or entry dates associated with records**

Field Name	Search Code	Search Examples	Display Codes
Entry Date	/ED	S L1 AND ED>DEC 2006	ED
Entry Date + Legal Status Update	/EDLS	S EDLS = JAN 2008	not displayed
Entry Date Patent (new record)	/EDP	S 20061026/EDP	EDP, UPALL
Entry Date Priority	/EDPR	S 29 JAN 2009/EDPR	PRAI
Update Date	/UP	S 20070102/UP	LS
Update Legal Status	/UPLS	S 20070222/UPLS	LS
All updates of a record	/UPM	S 20070215/UPM	not displayed

Update codes or entry dates associated with patent families ⁽¹⁾

Field Name	Search Code	Search Examples	Display Codes
Entry Date new patent family	/EDF	S L1 AND EDF>21 MAR 2007	UPALL
All changes in a patent family	/UPFA	S L1 AND 20070329/UPFA	not displayed
Any change of a bibliographic element in a patent family	/UPFB	S L1 AND 20070215/UPFB	UPALL
Update Date for combined or split Patent Family (3)	/UPFC	S L1 AND UPFC=OCT 2009	UPFC
Entry of a new database record (document) into a patent family (level 1)	/UPFD	S L1 AND 20070215/UPFD	UPALL
Entry of a new publication and changes in legal status	/UPFE	S L1 AND 20070321/UPFE	not displayed
Any change of a legal status in a patent family	/UPFL	S L1 AND 20070321/UPFL	UPALL
Entry of a new publication level into a patent family	/UPFP	S L1 AND 20070222/UPFP	UPALL

- (1) Special display formats available for monitoring patent families weekly.

Sample Records

DISPLAY MAX

AN 110618813 INPADOCDB ED 20211014 EW 202141 UP 20211014 UW 202341 Full-text
FN 57052201
SFN 63355078 DOCID 558563612 PUBID 558563613
TIEN DUCTED PUPIL EXPANSION.
TL English
IN Ayres, Mark R.; Schlottau, Friso; Urness, Adam; Anderson, Kenneth E.
INS AYRES MARK R, US; SCHLOTTAU FRISO, US; URNESS ADAM, US; ANDERSON KENNETH E, US
PA Akonia Holographics LLC
PAS AKONIA HOLOGRAPHICS LLC, US
UO APPLE INC
UOS Apple
DT Patent
PI US 20210311260 A1 20211007 English
PIT USA1 FIRST PUBLISHED PATENT APPLICATION [FROM 2001 ONWARDS]
DAV 20211007 unexamined-printed-without-grant
STA PRE-GRANT PUBLICATION
XPD 20370620 (incl. 0 PTA days)
STI ALIVE
AI US 2021-17352156 A 20210618 USA Patent application
PRAI US 2021-17352156 A 20210618 USA Patent application (N,20211014)
US 2018-15894903 A 20180212 USA3 Prior application claimed for a
division (N,20180913)
WO 2017-US38399 W 20170620 WOWW Additional PCT application
(N,20180913)
US 2017-62465619 P 20170301 USP Provisional application
(Y,20180111)
US 2017-62479985 P 20170331 USP Provisional application
(Y,20180111)
US 2017-62504890 P 20170511 USP Provisional application
(Y,20180111)
IPCI G02B0006-34; G02B0027-00; G02B0027-01
CPC G02B0027-017; G02B2027-0178; G02B2027-0123; G02B0006-34; G02B0027-4272;
G02B0027-0172; G02B0027-0081
AL English
ABEN A device including a waveguide having a first waveguide surface and a
second waveguide surface parallel to the first waveguide surface is
disclosed. The device may include a first light coupling device
operatively coupled to the waveguide. The first light coupling device may
include a first duct structure and a second duct structure oriented to
reflect in-coupled light. Each of the first duct structure and the second
duct structure may include a first planar region and a second planar
region parallel to the first planar region and a first surface and a
second surface parallel to the first surface. The device may also include
a second light coupling device disposed between the first waveguide
surface and the second waveguide surface. The second light coupling
device may be positioned to receive reflected in-coupled light from
the first light coupling device.
FA ABEN; CPC; DAV; DT; IN; INS; INO; IPCI; LA; LSFT; PA; PAS; PI; STI; TIEN;
UO; UOS; XPD

AN 110618813 INPADOCDB ED 20231012 EW 202341 UP 20231012 UW 202343 Full-text
FN 57052201
SFN 63355078 DOCID 558563612 PUBID 599562897
TIEN Ducted pupil expansion.
TL English
IN Ayres, Mark R.; Schlottau, Friso; Urness, Adam; Anderson, Kenneth E.
INS AYRES MARK R, US; SCHLOTTAU FRISO, US; URNESS ADAM, US; ANDERSON KENNETH E, US
PA Akonia Holographics LLC
PAS AKONIA HOLOGRAPHICS LLC, US
UO APPLE INC
UOS Apple

DT Patent
 PI US 11774681 B2 20231003 English
 PIT USB2 REEXAM. CERTIF., N-ND REEXAM. or GRANTED PATENT AS SECOND PUBLICATION [FROM 2001 ONWARDS]
 DAV 20231003 printed-with-grant
 STA GRANTED
 XPD 20370620 (incl. 0 PTA days)
 STI ALIVE
 AI US 2021-17352156 A 20210618 USA Patent application
 PRAI US 2021-17352156 A 20210618 USA Patent application (N,20211014)
 US 2018-15894903 A 20180212 USA3 Prior application claimed for a division (N,20180913)
 WO 2017-US38399 W 20170620 WOWW Additional PCT application (N,20180913)
 US 2017-62465619 P 20170301 USP Provisional application (Y,20180111)
 US 2017-62479985 P 20170331 USP Provisional application (Y,20180111)
 US 2017-62504890 P 20170511 USP Provisional application (Y,20180111)
 IPCI G02B0027-00; G02B0006-34; G02B0027-01; G02B0027-42
 CPC G02B0027-017; G02B2027-0178; G02B2027-0123; G02B0006-34; G02B0027-4272; G02B0027-0172; G02B0027-0081
 AL English
 ABEN A device including a waveguide having a first waveguide surface and a second waveguide surface parallel to the first waveguide surface is disclosed. The device may include a first light coupling device operatively coupled to the waveguide. The first light coupling device may include a first duct structure and a second duct structure oriented to reflect in-coupled light. Each of the first duct structure and the second duct structure may include a first planar region and a second planar region parallel to the first planar region and a first surface and a second surface parallel to the first surface. The device may also include a second light coupling device disposed between the first waveguide surface and the second waveguide surface. The second light coupling device may be positioned to receive reflected in-coupled light from the first light coupling device.
 FA ABEN; CPC; DAV; DT; IN; INS; INO; IPCI; LA; PA; PAS; PI; STI; TIEN; UO; UOS; XPD

LEGAL STATUS
 20210618 USFEPP FEE PAYMENT PROCEDURE
 ENTITY STATUS SET TO UNDISCOUNTED (ORIGINAL EVENT CODE: BIG.); ENTITY STATUS OF PATENT OWNER: LARGE ENTITY
 FEE Fee Payment
 U PAYMENT
20231019
 20210823 USSTPP INFORMATION ON STATUS: PATENT APPLICATION AND GRANTING PROCEDURE IN GENERAL
 DOCKETED NEW CASE - READY FOR EXAMINATION
 EXA Examination, Search Report
 Z CLASSIFICATION PENDING
20211111
 20220720 USSTPP INFORMATION ON STATUS: PATENT APPLICATION AND GRANTING PROCEDURE IN GENERAL
 NON FINAL ACTION MAILED
 EXA Examination, Search Report
 Z CLASSIFICATION PENDING
20220804
 20221120 USSTPP INFORMATION ON STATUS: PATENT APPLICATION AND GRANTING PROCEDURE IN GENERAL
 RESPONSE TO NON-FINAL OFFICE ACTION ENTERED AND FORWARDED TO EXAMINER
 EXA Examination, Search Report
 Z CLASSIFICATION PENDING
20221215
 20230525 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
Z CLASSIFICATION PENDING
.....20230713
20230830 USSTPP INFORMATION ON STATUS: PATENT APPLICATION AND GRANTING
PROCEDURE IN GENERAL
PUBLICATIONS -- ISSUE FEE PAYMENT VERIFIED
EXA Examination, Search Report
Z CLASSIFICATION PENDING
.....20230914
20230913 USSTCF INFORMATION ON STATUS: PATENT GRANT
PATENTED CASE
MIS Miscellaneous or Ambiguous
F IP RIGHT GRANT
.....20230928

DISPLAY EFAM

AN 97918966 INPADOCDB

PATENT FAMILY INFORMATION

PRIORITY 1: US 2018-15960378 A 20180423

+-----AI-----+		+-----PI-----+	
AU 2019-202756	A 20190418	AU 2019202756	A1 20191107
EP 2019-170270	A 20190418	EP 3561690	A1 20191030
US 2020-17070583	A 20201014	US 20210029220	A1 20210128
US 2018-15960378	A 20180423	US 20190327338	A1 20191024
		US 10855806	B2 20201201

PRIORITY 2: US 2020-17070583 A 20201014

+-----AI-----+		+-----PI-----+	
US 2020-17070583	A 20201014	US 20210029220	A1 20210128

FSTAT 2 priorities, 4 applications, 5 publications (1 EPO simple family)
3 countries, 29 legal status events

DISPLAY CFM2

AN 105319702 INPADOCDB

PATENT FAMILY INFORMATION

+----- Publications -----+		+----- Applications -----+		+- STI -+
CA 3082170	A1 20201205	CA 2020-3082170	A 20200602	A
CN 112046767	A 20201208	CN 2020-10505485	A 20200605	A
EP 3747767	A1 20201209	EP 2020-178604	A 20200605	A
US 20200385138	A1 20201210	US 2019-16432118	A 20190605	A

+----- Priorities -----+	
US 2019-16432118	A 20190605

FSTAT 1 priority, 4 applications, 4 publications (1 EPO simple family)
4 countries, 14 legal status events

DISPLAY ALLO

AN 101866302 INPADOCDB ED 20200716 EW 202029 UP 20201029 UW 202045 Full-text
FN 68037108
TIEN X-RAY IMAGING APPARATUS.
TL English
TIO X射线摄影装置
TL Chinese
IN SHIROTA KEN; SAKAGUCHI JUNPEI; OKUMURA HIROSHI
INS SHIROTA KEN; SAKAGUCHI JUNPEI; OKUMURA HIROSHI
INO 代田健; 坂口淳平;
奥村皓史
PA SHIMADZU CORP
PAS SHIMADZU CORP
PAO 株式会社岛津制作所
DT Patent
PI CN 111374685 A 20200707 Chinese
PNO CN111374685
CN111374685
PIT CNA UNEXAMINED APPLICATION FOR A PATENT FOR INV.
DAV 20200707 unexamined-printed-without-grant
STA PRE-GRANT PUBLICATION
XPD 20391216
AI CN 2019-11324921 A 20191216 CNA Patent application
APO CN201911324921
CN201911324921.2
PRAI JP 2018-242091 A 20181226 JPA Patent application
(Y, 20200709)
IPCI A61B0006-00
CPC A61B0006-588; A61B0006-08; A61B0006-4452; A61B0006-4482; A61B0006-54; A61B0006-40;
A61B0006-44; A61B0006-54; A61B0006-0487; A61B0006-4452; A61B0006-4464;
A61B0006-4476; A61B0006-4482; A61B0006-587
AS National Office
AL English
ABEN The invention provides a X-ray imaging apparatus which includes a controller
configured or programmed to perform control to change an amount of assist from a
drive in manually moving a moving body based on at least one of operation of an
operation button configured to receive an operation for moving the moving body or
an operation for aligning the moving body and a current position and target
position of the moving body.
AS National Office
AL Chinese
ABO 本发明提供一种X射线摄影装置。X射线摄影装置
具备控制部、所述控制
部进行以下控制：基于
移动体的当前位置和目
标位置、以及接受用于
使移动体移动的操作或
用于将移动体进行位置
对准的操作的操作按钮
的操作中的至少一方，
来变更手动地使移动体
移动时的来自驱动部的
辅助量。。
FA ABEN; ABO; CPC; DAV; DT; IN; INS; INO; IPCI; LA; PA; PAS; PAO; PI; STI; TIEN; TIO;
XPD

In North America

CAS Customer Center:
P.O. Box 3012
Columbus, Ohio 43210-0012
U.S.A.

Phone: 800-753-4227 (North America)
614-447-3731 (worldwide)
E-mail: help@cas.org
Internet: www.cas.org

In Europe

CAS Customer Center EMEA
represented by
FIZ Karlsruhe - Leibniz-Institute for Information Infrastructure
Hermann-von-Helmholtz-Platz 1
76344 Eggenstein-Leopoldshafen
Germany

Phone: +49-721-9588 3155
E-mail: EMEAhelp@cas.org
Internet: www.fiz-karlsruhe.de

In Japan

JAICI
(Japan Association for International Chemical Information)
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)
E-mail: support@jaici.or.jp (Technical Service)
customer@jaici.or.jp (Customer Service)
Internet: www.jaici.or.jp