USPATFULL

Subject Coverage	U.S. patents and applications in all areas of technology
File Type	Full text
Features	Thesauri: U.S National Patent Classification (no longer updated), Cooperative Patent Classification, International Patent Classification Alerts (SDIs): Every update (twice a week), Weekly, or Monthly (Weekly is the default) CAS Registry Number® Identifiers: ☑ Page Images: ☐ Keep & Share: ☑ SLART: ☑ Structures: ☐ Register Links: ☑
Record Content	• Full text and current classifications for the original (first published) publications of U.S. patents and applications issued by the U.S. Patent and Trademark Office since 1975 • Complete Chemical Abstracts indexing for one equivalent U.S. chemical patent may also be included in a record • Legal status information for U.S. patents since 1980 • Patent Classifications: NCL, CPC, IPC • PatentPak® - specific PDF links and data
File Size	More than 12.4 million records (07/2025)
Coverage	• 1975-present • Partial coverage of selected technologies 1971-1974 • Defensive publications from 1976-present • U.S. applications from 2001-present
Updates	• Twice a week • U.S. Patent Classifications – no longer updated • Cooperative Patent Classifications – updated weekly • International Patent Classifications – updated quarterly
Language	English
Database Producer	U.S. Patent and Trademark Office Office of Data Base Administration Data Maintenance Division 2011 Jefferson-Davis Highway, CP2-9C18 Arlington, VA 22202 USA
Sources	U.S. patents issued by the U.S. Patent and Trademark Office

Clusters	• AEROTECH • AGRICULTURE • ALLBIB • AUTHORS • BIOSCIENCE • CASRNS • COMPUTER • CONSTRUCTION • CORPSOURCE • ELECTRICAL • ENGINEERING • ENVIRONMENT • FUELS • FULLTEXT	• GEOSCIENCE • HEALTH • MATERIALS • MEDICINE • METALS • NPS • PATENTS • PETROLEUM • PHARMACOLOGY • PHYSICS • PNTTEXT • POLYMERS • USPATALL STN Database Clusters information (PDF).
Related Databases	• USPAT2 • USPATOLD	
Pricing	Enter HELP COST at an arrow prompt (=>).	

Search and Display Field Codes

Fields that allow left truncation are marked with an asterisk (*).

Search Field Name	Search Code	Search Examples	Display Codes
Basic Index * (contains single words from the title (TI), abstract (AB), claims (CLM), detailed description (DETD), summary (SUMM), drawing description (DRWD), parent case data (PARN), and government interest (GOVI) fields)	None (or /BI)	S GROWTH REGUL? S NAPHTHALENE? S ?VECTOR?	AB, CLM, DETD, DRWD, GOVI, PARN, SUMM, TI
Abstract *	/AB	S COBALT CATALYST?/AB	AB
Accession Number	/AN	S 94:1112/AN S 2001:100195/AN	AN
Applicant City (Corporate) **(12)**	/USPA.CTY	S CAMBRIDGE/USPA.CTY	USPA
Applicant Country (Corporate) **(12)**	/USPA.CNY	S ARGENTINA/USPA.CNY	USPA
Applicant Name (Corporate) **(12)**	/USPA	S GENOMICS/USPA	USPA
Applicant State (Corporate) **(12)**	/USPA.ST	S OH/USPA.ST	USPA
Application Country	/AC	S US/AC AND L1	AI
Application Date **(1)**	/AD	S NOV 23 1998/AD S 19981123/AD	AI
Application Number **(2,11)**	/AP	S US1977-851992/AP S US2013-13261341/AP	AI
Application Year **(1)**	/AY	S 1997/AY	AI
Art Unit **(1)**	/ARTU (or /ART)	S 126/ARTU	ARTU
CAS Registry Number (RN) (CAS data)	/RN	S 60-35-5/RN	IT, RN
Claim Text *	/CLM	S COBALT (S) SALT#/CLM	CLM
Classification Code (CAS data) (code and text) **(3)**	/CC	S 27/CC S HETEROCYCLIC/CC	CC
Controlled Term (CAS data)	/CT	S ANIMAL GROWTH SUBSTANCES/CT	CT, IT
Cooperative Patent Classification **(4,10)**	/CPC	S C12N0009/CPC	CPC
Cooperative Patent Classification, Action Date	/CPC.ACD	S 20121113/CPC.ACD	CPC.TAB
Cooperative Patent Classification, Combination Sets	/CPC.CS	S (B29C0066-71 (L) B29K2021-00)/CPC.CS S (B29C0066-71 AND B29K2021-00)/CPC.CS S C04B0028-04/CPC (T) COMBINATION SET/CPC.KW	CPC.TAB
Cooperative Patent Classification, Keywords **(10)**	/CPC.KW	S C12N0009/CPC (S) I/CPC.KW	CPC.TAB
Cooperative Patent Classification, Version	/CPC.VER	S 20130101/CPC.VER	CPC.TAB
Cooperative Patent Initial Classification	/CPCI	S A61K0006-0014/CPCI	CPCI
Disclaimer Date **(1)**	/DCD	S 19940111/DCD S JAN 11 1994/DCD	DCD
Document Type (code and text)	/DT (or /TC)	S REISSUE/DT	DT
Entry Date **(1)**	/ED	S L1 AND ED>JAN 1, 2001	Not displayed
Examiner Name	/EXNAM	S SIEGEL ALAN M/EXNAM	EXNAM
Examiner's Field of Search	/EXF	S 564/EXF;S 564/48/EXF	EXF
Exemplary Claim Text *	/ECLM	S COBALT (S) MIXTURE/ECLM	CLM, ECLM
Field Availability (code and text)	/FA	S PARENT CASE DATA/FA S PARN/FA	Not displayed
File Segment (code and text)	/FS	S GRANTED/FS or S APPLICATION/FS	FS
Government Interest	/GOVI	S W-7405-ENG-48/GOVI	GOVI
Index Term (CAS data)	/IT	S REACTION OF/IT S 61895-14-5P/IT	IT
Inventor	/IN (or /AU)	S BENTLEY TERENCE J?/IN	IN
Inventor Address, City	/IN.CTY	S CRANBURY/IN.CTY	IN, INA
Inventor Address, Country	/IN.CNY	S JAPAN/IN.CNY	IN, INA
Inventor Address, State	/IN.ST	S NJ/IN.ST	IN, INA
Inventor Address, ZIP code **(1)**	/IN.ZIP	S 43017/IN.ZIP	IN, INA

Search and Display Field Codes (cont'd)

Search Field Name	Search Code	Search Examples	Display Codes
International Patent Classification, Action Date	/IPC.ACD	S 20010529/IPC.ACD	IPC
International Patent Classification, Keyword Terms	/IPC.KW	S INITIAL/IPC.KW	IPC
International Patent Classification, Main **(4,5.9)**	/ICM	S C07D/ICM S C07D-209/ICM S C07D-209-34/ICM S C07C-125/06/ICM S A01B001-00-A01B003-00/ICM S ENZYMES/ICM	ICM
International Patent Classification, Main Group Range-Searchable **(1)**	/MGR	S 200-209/MGR	ICM
International Patent Classification, Secondary **(4,5,9)**	/ICS	S C07C125/ICS S A01B001/00-A01B003/00/ICS S ENZYMES/ICS	ICS
International Patent Classification, Subgroup Range-Searchable **(1)**	/SGR	S 400-600/SGR	IPC
International Patent Classification, Version(s) **(1)**	/IPC.VER	S 7/IPC.VER	IPC
Language (code and text)	/LA	S L1 AND EN/LA	LA
Legal Representative **(3)**	/LREP (or /AG)	S JACKSON H G/LREP	LREP
Line Count **(1)**	/LN.CNT	S 1000-1500/LN.CNT	LN.CNT
National Patent Classification, Current, Main and Secondary **(4,6)**	/NCL	S 106035000/NCL S 106/035.000/NCL S 106/35/NCL S ZEOLITES+NT/NCL	NCL
National Patent Classification, Current, Main **(4,6)**	/NCLM	S 423308000/NCLM S 423/NCLM S ZEOLITES+NT/NCLM	NCLM
National Patent Classification Current, Secondary **(4,6)**	/NCLS	S 106038000/NCLS S 106/NCLS S ZEOLITES+NT/NCLS	NCLS
National Patent Classification, Issue, Main and Secondary **(4,6)**	/INCL	S 433228000/INCL S 433/INCL S 433/227-433/229/INCL S ZEOLITES+NT/INCL	INCL
National Patent Classification, Issue, Main **(4,6)**	/INCLM	S 523118000/INCLM S 523/INCLM S ZEOLITES+NT/INCLM	INCLM
National Patent Classification, Issue, Secondary **(4,6)**	/INCLS	S 106035000/INCLS S 106/INCLS S ZEOLITES+NT/INCLS	INCLS
Number of Claims **(1)**	/CLMN	S CLMN>20	CLMN
Other Source	/OS	S 99:9994/OS	OS
Patent Assignee **(3)**	/PA (or /CS)	S AMERICAN CYANAMID/PA	PA
Patent Assignee Address, City	/PA.CTY	S STAMFORD/PA.CTY	PA
Patent Assignee Address, Country	/PA.CNY	S UNITED KINGDOM/PA.CNY	PA
Patent Assignee Address, State	/PA.ST	S CT/PA.ST	PA
Patent Assignee Address, ZIP code **(1)**	/PA.ZIP	S 53201/PA.ZIP	PA
Patent Assignee Type	/PAT	S U S CORPORATION/PAT	PAT
Patent Assignee, Original	/PAO	S ABBOTT/PAO	PAO, RAI
Patent Country	/PC	S US/PC AND L2	PI
Patent Kind **(7)**	/PK	S USA1/PK	PI
Patent Number **(2)**	/PN	S US5933861/PN S US2001008908/PN	PI
Patent Number/Kind Code	/PNK	S US20050136407/PNK	PNK
Priority Country	/PRC	S DE/PRC	PRAI
Priority Date **(1)**	/PRD	S 19981213/PRD S PRD>=DEC 13 1998	PRAI
Priority Number **(2,8,11)**	/PRN	S DE1990-4041295/PRN S US2013-61686038/PRN S US2013-686038P/PRN	PRAI

Search and Display Field Codes (cont'd)

Search Field Name	Search Code	Search Examples	Display Codes
Priority Year **(1)**	/PRY	S PRY>=1997	PRAI
Publication Date **(1)**	/PD	S JUNE 1 1999/PD	PI
Publication Year **(1)**	/PY	S PY>=1998	PI
Reassignment Agent	/RAA	S BAKER BOTTS/RAA	RAA, RAI
Reassignment Company	/RAC	S ABBOTT/RAC	RAC, RAI
Reassignment Country	/RAC.CNY	S AUSTRALIA/RAC.CNY	RAI
Reassignment Date **(1)**	/RAD	S 20070411/RAD	RAD, RAI
Reassignment Recorded Year **(1)**	/RARY	S 2010/RARY	Not displayed
Reassignment Execution Date **(1)**	/RAXD	S 20080324/RAXD	RAXD, RAI
Reassignment Execution Year **(1)**	/RAXY	S 2011/RAXY	Not displayed
Reassignment Kind	/RAK	S CABLE/RAK	RAK, RAI
Reassignment Update Date **(1)**	/RAUP	S 20071004/RAUP	RAUP, RAI
Reference Non-Patent Information	/REN	S HOUSE/REN S SYNTHE? REACTION#/REN	REN
Reference Patent Classification **(4,6)**	/RPCL	S 100003000/RPCL	REP
Reference Patent Country	/RPC	S L7 AND US/RPC	REP
Reference Patent Inventor	/RPIN	S ASATO/RPIN	REP
Reference Patent IPC	/RPIC	S A01B/RPIC S A01B069/RPIC S A01B069-04/RPIC	REP
Reference Patent Number **(2)**	/RPN	S US5174198/RPN	REP
Reference Patent Publication Date **(1)**	/RPD	S DEC 1992/RPD	REP
Reference Patent Publication Year **(1)**	/RPY	S 1970/RPY	REP
Related Application Country	/RLC	S US/RLC	RLI
Related Application Date **(1)**	/RLD	S 12 AUG 1976/RLD	RLI
Related Application Number **(2,11)**	/RLN	S US76-713768/RLN S US2000-532918/RLN	RLI
Related Application Type	/RLT	S DIVISION OF/RLT	RLI
Related Application Year **(1)**	/RLY	S RLY<1976	RLI
Related Patent Publication Date **(1)**	/RLPD	S 2011/RLPD	RLI
Related Patent Number **(2)**	/RLPN	S US13887504/RLPN	RLI
Related Patent Publication Year **(1)**	/RLPY	S 1973/RLPY	RLI
Related Publication Indicator	/RLP	S ABANDONED/RLP	RLI
Section Cross-reference (CAS data) **(3)**	/SX	S 14/CC,SX S PHARMACOLOGY/SX	CC, SX
Supplementary Term (CAS data)	/ST	S GROWTH PROMOT?/ST	ST
Term of Patent **(1)**	/PTERM	S 1-4/PTERM	PTERM
Title *	/TI	S THIOPHEN?/TI	TI
Ultimate Owner	/UO	S BASF/UO	UO
Ultimate Owner Standardized	/UOS	S BASF/UOS	UOS
Update Date **(1)**	/UP	S L2 AND UP>NOV 1 2001	Not displayed
Update Date of CA Indexing **(1)**	/UPCA	S UPCA>=20011106	Not displayed

(1) Numeric search field that may be searched with numeric operators or ranges.
(2) Either STN format or Derwent format may be used.
(3) Search with implied (S) proximity is available in this field.
(4) An online thesaurus is available for this field.
(5) This field contains the classifications and catchwords for main classification subject headings and subheadings from the current (7th) edition of the WIPO International Patent Classifications (IPC) manual. To search the classifications from any of the specific editions (1-8) of the IPC manual, use the field code followed by the edition number, e.g., /IC2, ICM2, /ICS2 for the 2nd edition. Catchwords are included only in the fields for the 7th, 6th, and 5th editions of the IPC manual.
(6) This field is range-searchable in Manual of Classification order. However, it is not a numeric field and may not be searched using numeric operators.
(7) Available for patent documents published starting in 2001.
(8) U.S. provisional priority numbers are searched only with the P appended, e.g., US1999-121903P/PRN.
(9) These fields have not been populated since December 31, 2005, with the introduction of IPC Reform.
(10) When searching for combinations of CPC and CPC.KW data, use (S) proximity operator.
(11) Application numbers for U.S. utility patents from series code 13 forward, design patents (series code 29) and provisional patent applications (series code 60 and 61) may be searched either with or without their series code. Include the series code if known to ensure precision. Note that provisional patent application numbers searched without their series codes must have a P appended to the end of the number (e.g., US2013-686038P). Series code information is not available for U.S. patent application numbers with series codes below 13.
(12) Available for selected patent documents usually from September 2012 or later.

Property Fields[(1)]

In USPATFULL a numeric search for a specific set of physical properties (/PHP) is available within the Basic Index fields (most notably TI, AB, CLM, DETD, and SUMM). The numeric values are not displayed as single fields, but ARE instead highlighted within HIT, KWIC, and ALL displays.

EXPAND in the /PHP field to find numeric properties of interest, or type HELP NPS at an arrow prompt while in USPATFULL to see a list of all available numeric properties. The /PHP index contains a complete list of codes and related text for all physical properties available for numeric property searching in USPATFULL.

Field Code	Property	Unit	Symbol	Search Examples
/AOS	Amount of Substance	Mol	mol	S 10 /AOS
/BIR	Bit Rate	Bit/Second	bit/s	S 8000-10000/BIR
/BIT	Stored Information	Bit	Bit	S BIT > 3 MEGABIT
/CAP	Capacitance	Farad	F	S 1-10 MF/CAP
/CATA	Catalytic Activity	Katal	kat	S 200-250 KAT/CATA
/CDN	Current Density	Ampere/Square Meter	A/m^2	S CDN>10 A/M**2
/CMOL	Molarity, Molar Concentration	Mol/Liter	mol/L	S UREA/BI (S) 8/CMOL
/CON	Conductance	Siemens	S	S 1S-3/CON
/DB	Decibel	Decibel	dB	S DB>50
/DEG	Degree	Degree	°	S CYLINDER/BI (S) 45/DEG
/DEN (/C)	Density (Mass Concentration	Kilogram/Cubic Meter	kg/m^3	S 5E-3-10E-3/DEN
/DEQ	Dose Equivalent	Sievert	Sv	S 100/DEQ
/DOA	Dosage	Milligram/Kilogram/Day	mg/kg/day	S 10 MG/KG/DAY/DOA
/DOS	Dose	Milligram/Kilogram	mg/kg	S DOS>0.8
/DV	Viscosity, dynamic	Pascal * Second	Pa * s	S DV>5000
/ECH (/CHA)	Electric Charge	Coulomb	C	S 0.0001-0.001/ECH
/ECO (/ECND)	Electrical Conductivity	Siemens/Meter	S/m	S ECO>800 S/M (15A) AQUEOUS
/ELC (/ECC)	Electric Current	Ampere	A	S 1-10/ELC
/ELF (/ECF)	Electric Field	Volt/Meter	V/m	S 200/ELF
/ENE	Energy	Joule	J	S DROPLETS (10A) 40 JOULE - 70 JOULE /ENE
/ERE (/ERES)	Electrical Resistivity	Ohm * Meter	Ohm * m	S ERE>0.1
/FOR	Force	Newton	N	S 50 N /FOR
/FRE (/F)	Frequency	Hertz	Hz	S OSCILLAT?/BI (S) 1- 3/FRE
/IU	International Unit	none	IU	S IU>1000 (P) VITAMIN A
/KV	Viscosity, kinematic	Square Meter/Second	m^2/s	S METHYLPOLYSILOXANES/BI (10A) 100-200 CST/KV
/LEN (/SIZ)	Length, Size	Meter	m	S 1-4/LEN
/LUME	Luminous Emittance, Illuminance	Lux	lx	S 10-50/LUME
/LUMF	Luminous Flux	Lumen	Lm	S LUMF>1000
/LUMI	Luminous Intensity	Candela	cd	S LUMI<4
/M	Mass	Kilogram	kg	S ALLOY/BI (30A) 1E-10-1E-5/M
/MCH	Mass to Charge Ratio	none	m/z	S MCH=1
/MFD (/MFS)	Magnetic Flux Density	Tesla	T	S MFD>102
/MFR (/MFL)	Mass Flow Rate	Kilogram/Second	kg/s	S MFR<0.1
/MFST	Magnetic Field Strength	Ampere/Meter	A/m	S 50 A/M/MFST
/MM (/MW, /MOM)	Molar Mass, Molecular Weight	Gram/Mol	g/mol S	2000-3000 G/MOL/MM

Property Fields[(1)] (cont'd.)

Field Code	Property	Unit	Symbol	Search Examples
/MOLS	Molality of Substance	Mol/Kilogram	mol/kg	10 MOL/KG/MOLS
/MVR	Melt Volume Rate, Melt Flow Rate	none	g/10 min	S 3/MVR
/PER	Percent (Proportionality)	none	%	S POLYMER?/AB (5A) 4/PER
/PHV (/PH)	pH Value	pH	pH	S 7.4-7.6/PHV
/POW (/PW)	Power	Watt	W	S "HG-XE-?"/BI (S) 100-200 WATT/POW
/PPM	Parts per million	PPM	ppm	S 100 PPM /PPM (10A) ADDITIVE/BI
/PRES (/P)	Pressure	Pascal	Pa	S (VACUUM (5A) DISTILL?)/BI (S) 1000-1100/PRES
/RAD	Radioactivity	Becquerel	Bq	S 1-10/RAD
/RES	Electrical Resistance	Ohm	Ohm	S SENSOR /BI (S) 10- 100/RES
/RI	Refractive Index	none	none	S 3-4/RI
/RSP	Rotational Speed	Revolution/Minute	rpm	S 2 RPM - 100 RPM /RSP (S) ENGINE/BI
/SAR	Area	Square Meter	m^2	S PLATE/BI (S) 10 M**2 - 100 M**2 /SAR
/SOL (/SLB)	Solubility	Gram/100 gram	g/100 g	S SOL>20 G/100G (5A) WATER
/SSAM	Specific Surface Area, Mass	Square Meter/ Kilogram	m^2/kg	S 9/SSAM
/STSC	Surface Tension, Spring Constant	Joule /Square Meter	J/m^2	S 60 J/M**2/STSC
/TCO (/TCND)	Thermal Conductivity	Watt/Meter * Kelvin	W/m * K	S 1/TCO (S) HEAT?
/TEMP (/T)	Temperature	Kelvin	K	S 20-25/TEMP
/TEX	Tex	Gram/Kilometer	g/km	S 1-5/TEX
/TIM	Time	Second	s	S ?INCUB?/BI (10A) 50 S - 150 S /TIM
/VEL (/V)	Velocity	Meter per Second	m/s	S REDUC?/BI (S) 1E-3-5E-3/VEL
/VELA	Velocity, Angular	Radian/Second	rad/s	S VELA>10
/VLR	Volumetric Flow Rate	Cubic Meter/Second	m^3/s	S 1 M**3/S - 2 M**3/S /VLR (S) ABRASIVE
/VOL	Volume	Cubic Meter	m^3	S 1E-8-2E-8/VOL.EX
/VOLT	Voltage	Volt	V	S TENSION/BI (10A) 5E-3 V <VOLT

(1) Exponential format is recommended for the search of particularly high or low values, e.g., 1.8E+7 or 1.8E7 (for 18000000) or 9.2E-8 (for 0.000000092).

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
Cooperative Patent Classification **(1)**	/CPC	/CPCI, /CPCR	S C12N0009/CPC	CPC, CPCI, CPCR
International Patent Classifications **(2,3)**	/IPC	/IC, /ICM, /ICS, /IPCI, /IPCR	S A01B/IPC S A01B001/IPC	IPC
International Patent Classification (Old IPC)	/IPC.OLD	/IC, /ICM, /ICS	S A01?/IPC.OLD	IPC
Application Number Group **(1,4)**	/APPS	/AP, /PRN, /RLN	S US56-626454/APPS S 56US-0626454/APPS S US2013-13261341/APPS S US2013-261341/APPS	AI, PRAI, RLI
Patent Applicant/Assignee **(5)**	/PASS	/PA, /UO, /UOS, /USPA	S GENOMICS/PASS	PA, UO, UOS, USPA
Patent Country Group	/PCS	/PC, /RPC	S US/PCS AND L1	PI, REP, RLI
Patent Number Group **(1)**	/PATS	/PN, /RLPN, /RPN	S US102601/PATS S US0102601/PATS	PI, REP, RLI

(1) Either STN format or Derwent format may be used.
(2) A thesaurus is available for this field.
(3) EXPAND and SELECT work with this field.
(4) Application numbers for U.S. utility patents from series code 13 forward, design patents (series code 29) and provisional patent applications (series code 60 and 61) may be searched either with or without their series code. Include the series code if known to ensure precision. Note that provisional patent application numbers searched without their series codes must have a P appended to the end of the number (e.g., US2013-686038P). Series code information is not available for U.S. patent application numbers with series codes below 13.
(5) The /PASS search code searches the applicant/assignee name portion of the /PA and /USPA fields, as well as the entirety of the UO and UOS fields.

CPC (/CPC) Thesaurus

The Cooperative Patent Classification (CPC) is jointly developed and maintained by the European Patent Office and the US Patent and Trademark Office. 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	All usually required terms (BT, SELF, CODE, DEF)	E C12M0001-00+ALL/CPC
AUTO **(1)**	Automatic relationship (BT, SELF, CODE, DEF)	E G01J003-443+AUTO/CPC
BT	Broader terms (BT, SELF)	E G01J0003-443+BT/CPC
CODE	Classification Code (SELF, CODE)	E CARTRIDGES+CODE/CPC
DEF	Definition (SELF, DEF)	E B65G0045-16+DEF/CPC
HIE	Hierarchy terms (all broader and narrower terms) (BT, SELF, DEF, NT)	E A01B0001-00+HIE/CPC
KT	Keyword terms (SELF, KT)	E LASER+KT/CPC
MAX	All associated terms	E G01J0003-44+MAX/CPC
NEXT	Next classification within the same class (SELF, NEXT)	E A01B0001-24+NEXT/CPC
NEXT(n)	Next n classification within the same class	E A01B0001-24+NEXT3/CPC
NT	Narrower terms	E G05B0001-04+NT/CPC
PREV	Previous Code within the same class (SELF, PREV)	E G05B0019-00+PREV/CPC
PREV(n)	Previous n classifications within the same class	E G05B0019-00+PREV2/CPC
TI	Complete Title of SELF Term and Broader Terms (BT, SELF)	E G05B0001-03+TI/CPC

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

Thesaurus Fields - IPC Thesaurus and U.S. National Patent Classification

A thesaurus is present for the National Patent Classification fields (/INCL, /INCLM, /INCLS, /NCL, /NCLM, /NCLS, /RPCL) and the International Patent Classification fields. The classifications and catchwords for the main headings and subheadings from the 8th edition of the WIPO International Patent Classification (IPC) manual are available in the following fields: /IC, /ICM, /ICS, /IPCI, and /IPCR. 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., /IC2, /ICM2, /ICS2 for the 2nd edition. Catchwords are included only in the thesauri for the 8th, 7th, 6th, and 5th editions.

Code	Content	Example
ALL	All associated terms	E 135100000+ALL/INCL E A01N025-04+ALL/IPC
AUTO **(1)**	Automatic Relationship (BT, SELF)	E A01N025-06/IC REL=ON
ED	Validity Range	E A01B001-00+ED/IPC
HIE	Hierarchy (Broader and Narrower Terms (all Broader and Narrower Terms) (BT, SELF, NT)	E 523523000+HIE/NCL E A01B001-06+HIE/IPC
INDEX	IPC Index Terms	E A01B001-00+INDEX/IPC
TI	Complete Title of the SELF Term	E 135+TI/NCLM E A01B001-04+TI/IPC
BT	Broader Terms (BT, SELF)	E 135120400+BT/NCLS E A01N029-12+BT/IPC
KT	Keyword Terms **(2)** (SELF, KT)	E ZEOLITES+KT/NCL
NT	Narrower Terms (SELF, NT)	E 126001**1+NT/INCL E A01N025-00+NT/IPC
NEXT	Next Classification	E 135086000+NEXT15/INCL E A01B001-20+NEXT3/ICS
PREV	Previous Classification	E 523523000+PREV3/NCLS E A01B001-20+PREV5/IPC
BRO	Complete Class	E 135019000+BRO5/INCL E A01B001-20+BRO3/IPC
RT	Related Terms	E A01B001-16+RT/IPC

(1) AUTOMATIC relationship is SET OFF. If you SET RELATION ON, the result of EXPAND without any relationship code is the same as described for AUTO.

(2) Keyword terms are the catchwords corresponding to the USPTO Manual of Classifications subject index headings and subheadings.

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 L3 1-10 TI,AB or D L3 1-10 TI AB. The fields are displayed or printed in the order requested.

Hit term highlighting is available in all fields except DRWN and ECL. Highlighting must be on when a SEARCH is performed to use the FHITSTR, HIT, HITRN, HITSTR, KWIC, and OCC formats.

Format	Content	Examples
AB	Abstract	D 1-3 AB
AI (AP) **(1)**	Application Information	D 4 9 AI
AN **(2)**	Accession Number	D AN
ARTU	Art Unit	D L3 5-7 ARTU
CC (SX)	Classification Code and Section cross-reference (CAS data)	D L3 CC 1-5
CLM	Patent Claim Text	D CLM L8
CLM(n) **(3)**	Patent Claim Text for Claim n	D CLM(2)
CLMN	Number of Claims	D CLMN
CT **(2)**	Controlled Term (CAS data)	D 4 CT
CPC	Cooperative Patent Classification	D CPC
CPCI	CPC Initial Classification	D CPCI
CPCR	CPC Reclassification	D CPCR
DCD	Disclaimer Date	D L3 6,8 DCD
DETD	Detailed Description	D 1-4 DETD
DRWD	Drawing Description	D L9 DRWD 3-6
DRWN	Number of Drawings	D DRWN
DT (TC)	Document Type	D DT 2,6-10
ECL	Exemplary Claim Number	D 7 L3 ECL
ECLM **(3)**	Exemplary Claim Text	D 1-5, 10 ECLM
EXF **(2)**	Examiner's Field of Search	D 1,5,8 EXF
EXNAM	Examiner Name	D EXNAM 4-8,11
FS **(2)**	File Segment	D FS
GOVI	Government Interest	D 3,5,7 GOVI
ICM **(2)**	IPC, Main	D 5-6 L1 ICM
ICS **(2)**	IPC, Secondary	D L4 1-6 ICS
IN (AU)	Inventor (includes INA)	D IN
INA **(3)**	Inventor Address	D L5 1-4 INA
INCLM **(2)**	Issue Main National Patent Classification Code	D 2,5 INCLM
INCLS **(2)**	Issue Secondary National Patent Classification Code	D L2 1-3 INCLS
IPC.F **(3)**	IPC, First Invention	D IPC.F
IPCI **(2,5)**	IPC, Initial Classification	D IPCI
IPCR **(2)**	IPC, Reclassification	D IPCR
IT	Index Term (CAS data)	D 1,5,10 IT
LA **(3)**	Language	D LA
LN.CNT	Line Count	D LN.CNT
LREP (AG)	Legal Representative	D 2 7 LREP
MFN	Microfilm Frame Number of document at the U.S. Patent and Trademark Office	D MFN
MRN	Microfilm Reel Number of document at the USPTO	D MRN
NCLM **(2)**	Current Main National Patent Classification Code	D 1-2 NCLM
NCLS **(2)**	Current Secondary National Patent Classification Code	D 1-5 NCLS
OS	Other Source Chemical Abstracts	D OS
PA (CS)	Patent Assignee (includes PAA and PAT)	D 1-3 PA
PAA **(3)**	Patent Assignee Address	D 4 9 PAA
PAO	Patent Assignee, Original	D PAO
PARN	Parent Case Data	D L3 5-7 PARN
PAT **(3)**	Patent Assignee Type	D L3 PAT 1-5
PI (PN) **(1)**	Patent Information	D PI L8
PNK	Patent Number/Kind Code	D PNK
PRAI (PRN) **(1)**	Priority Information	D PRAI
PTERM	Term of Patent	D 4 PTERM

DISPLAY and PRINT Formats (cont'd)

RAA	Reassignment Agent	D RAA
RAC	Reassignment Company	D RAC
RAD	Reassignment Date	D RAD
RAK	Reassignment Kind	D RAK
RAXD	Reassignment Execution Date	D RAXD
REN	Reference Non-Patent Information	D L3 6,8 REN
REP (RPN)	Reference Patent Information	D 1-4 REP
RLI (RLN) **(1)**	Related Application Information	D L9 RLI 3-6
RN **(3)**	CAS Registry Number (CAS data)	D RN 2,6-10
RNK **(6)**	Relevance Rank in single file	D RNK
RNKM **(6)**	Relevance Rank in multifiles	D RNKM
ST	Supplementary Terms (CAS data)	D ST
SUMM	Summary of the Invention	D L5 1-4 SUMM
TI **(2)**	Title	D 2,5 TI
UO	Ultimate Owner	D UO
UOS	Ultimate Owner Standardized	D UOS
USPA	Applicant Name (Corporate)	D USPA
ABS	AB	D L3 1-5 ABS
ALL **(1)**	PatentPak, AN, TI, IN, USPA, PA, UO, UOS, PI, AI, PTERM, DCD, RLI, PRAI, DT, FS, REP, REN, EXNAM, LREP, CLMN, ECL, DRWN, AB, GOVI, PARN, SUMM, DRWD, DETD, CLM, INCL (INCLM, INCLS), NCL (NCLM, NCLS), CPC (CPCI, CPCR), IPC (IPC.VER, ICM, ICS, IPCI, IPC), EXF, ARTU, PPAK (If PatentPak enabled)	D 3 ALL
APPS **(1)**	AI, PRAI, RLI	D APPS
BIB **(1)**	PatentPak, AN, TI, IN, PA, USPA, UO, UOS, PI, AI, PTERM, DCD, RLI, PRAI, DT, FS, EXNAM, LREP, CLMN, ECL, DRWN, LN.CNT	D BIB
BPP**(1)**	PatentPak, AN, TI, IN, PA, USPA, UO, UOS, PI, AI, PTERM, DCD, RLI, PRAI, DT, FS, EXNAM, LREP, CLMN, ECL, DRWN, LN.CNT, PPAK (If PatentPak enabled)	D BPP
CAS	OS, CC, ST, IT	D CAS 3 L2
CBIB	Compressed bibliographic information	D CBIB
CPC	CPCI, CPCR for the basic patent and patent family members	D CPC
CPC.TAB	CPC, CPC.KW, CPC.ACD, CPC.VER in tabular format	D CPC.TAB
CPC.UNIQ	Deduplicated list of CPC codes for the patent family	D CPC.UNIQ
DALL **(1)**	ALL, delimited for postprocessing	D 1-15 DALL
IABS	ABS, with a text label	D 1-4 IABS
IALL **(1)**	ALL, indented with text labels	D IALL 2
IBIB **(1)**	BIB, indented with text labels	D IBIB 4-10
IBPP**(1)**	BPP, indented with text labels	D IBPP
IC **(2)**	International Patent Classifications (IPC.VER, ICM, ICS)	D 1-4 L2 IPC
IMAX **(1)**	MAX, indented with text labels	D IMAX 1
INCL **(2)**	Issue National Patent Classification Code (INCLM, INCLS)	D 1,5 L4 INCL
IND	INCL (INCLM, INCLS), NCL (NCLM, NCLS), CPC (CPCI, CPCR), IPC (IPC.VER, ICM, ICS, IPCI, IPC), EXF, ARTU, OS, CC, ST, IT	D L2 IND 1-4
IPC **(2,5)**	International Patent Classifications (IPC.VER, ICM, ICS, IPCI, IPCR)	D 1-4 L2 IPC
IPC.TAB **(2,5)**	IPC in Tabular Format	D IPC.TAB
IPC.UNIQ	Unique IPC codes for a basic and equivalents	D IPC.UNIQ
IRAI (PA.HIST)	RAI, indented with text labels	D IRAI 1, D PA.HIST
ISPP	SPP, indented with text labels	D ISPP
ISTD **(1)**	STD, indented with text labels	D ISTD 1,5
MAX **(1)**	PatentPak, AN, TI, IN, USPA, PA, UO, UOS, PI, AI, PTERM, DCD, RLI, PRAI, DT, FS, REP, REN, EXNAM, LREP, CLMN, ECL, DRWN, AB, GOVI, PARN, SUMM, DRWD, DETD, CLM, INCL (INCLM, INCLS), NCL (NCLM, NCLS), CPC (CPCI, CPCR), IPC (IPC.VER, ICM, ICS, IPCI, IPCR), EXF, ARTU, OS, CC, ST, IT	D MAX L1 1
NCL **(2)**	National Patent Classification Code (NCLM, NCLS)	D 6,12 L1 NCL
PATS **(1)**	PI, REP, RLI	D PATS 1-3
RAI (LSUS)	RAD, RAXD, RAUP, RAK, PAO, RAC, RAC.CNY, RAA, MRN, MFN	D RAI, D LSUS
SBIB **(1)**	PatentPak, AN, TI, IN, USPA, PA, UO, UOS, PI, AI, RLI, PRAI, DT, FS, LN.CNT	D SBIB
SCAN **(2,4)**	AN, TI, NCL (NCLM, NCLS), CPC (CPCI, CPCR), IPC (IPC.VER, ICM, ICS, IPCI, IPCR) (random answer display, no answer)	D SCAN

DISPLAY and PRINT Formats (cont'd)

Format	Content	Examples
SPP **(1)**	PatentPak, AN, TI, IN, USPA, PA, UO, UOS, PI, AI, RLI, PRAI, DT, FS, LN.CNT, INCL (INCLM, INCLS), NCL (NCLM, NCLS), CPC (CPCI, CPCR), IPC (IPC.VER, ICM, ICS, IPCI, IPCR), EXF, PPAK (If PatentPak enabled)	D SPP
STD **(1)**	PatentPak, AN, TI, IN, USPA, PA, UO, UOS, PI, AI, RLI, PRAI, DT, FS, LN.CNT, INCL (INCLM, INCLS), NCL (NCLM, NCLS), CPC (CPCI, CPCR), IPC (IPC.VER, ICM, ICS, IPCI, IPCR), EXF (STD is the default)	D STD 1, 8
TRIAL (FREE) **(2)**	AN, TI, INCL (INCLM, INCLS), NCL (NCLM, NCLS), CPC (CPCI, CPCR), IPC (IPC.VER, ICM, ICS, IPCI, IPCR)	D TRIAL
FP **(1)**	Front page format for: PatentPak, PI, TI, IN, USPA, PA, UO, UOS, PTERM, DCD, AI, RLI, PRAI, IPC (IPC.VER, ICM, ICS, IPCI, IPCR), INCL (INCLM, INCLS), NCL (NCLM, NCLS), CPC (CPCI, CPCR), EXF, REP, REN, ARTU, EXNAM, LREP, CLMN, DRWN, AB	D FP
FPALL **(1)**	Front page format for: PatentPak, PI, TI, IN, USPA, PA, UO, UOS, PTERM, DCD, AI, RLI, PRAI, IPC (IPC.VER, ICM, ICS, IPCI, IPCR), INCL (INCLM, INCLS), NCL (NCLM, NCLS), CPC (CPCI, CPCR), REP, REN, EXF, ARTU, EXNAM, LREP, CLMN, DRWN, AB, PARN, SUMM, DRWD, DETD, CLM	D FPALL L10 1
FPBIB **(1)**	Front page format for: PatentPak, PI, TI, IN, USPA, PA, PTERM, DCD, AI, RLI, PRAI, REP, REN, EXNAM, LREP, CLMN, DRWN	D 1-10 FPBIB
CPC.HIT (HITCPC)	HIT display of CPC code searched	D CPC.HIT or D HITCPC
FHITSTR	First hit CAS Registry Number, its text modification, its CA index name, and its structure diagram	D CBIB FHITSTR
HIT	Fields containing hit terms	D HIT
HITIPC (IPC.HIT)	Hit IPC	D HITIPC or D IPC.HIT
HITPPAK	Hit PatentPak entry (based on chemical name or RN search)	D STD IT HITPPAK
HITRN	Hit CAS Registry Number and its text modification	D HITRN
HITSTR	Hit CAS Registry Number, its text modification, its CA index name, and its structure diagram	D HITSTR
KWIC	Up to 20 words before and after hit terms (KeyWord-In-Context)	D KWIC
OCC **(2)**	Number of occurrences of hit terms and fields in which they occur	D OCC

(1) By default, patent numbers, application and priority numbers are displayed in STN format. To display them in Derwent format, enter SET PATENT DERWENT at an arrow prompt. To reset display to STN format, enter SET PATENT STN.
(2) No online display fee for the format.
(3) Custom display only.
(4) SCAN must be specified on the command line, i.e., D SCAN or DISPLAY SCAN.
(5) IPCI-2 is a display label relating to the most recent publication of the patent document. It is part of the IPCI display field.
(6) The RNK and RNKM formats display only the hit term occurrence ranking for the record, with the following line: RELEVANCE SCORE ##. RNK is for the single file environment, while RNKM is for the multifile environment.

Extended DISPLAY and PRINT formats

Use the extended display formats to display not only the publication from the USPATFULL file, i.e., the original publication, but also the latest publication for the invention, if available, from the USPAT2 file.

Format	Content	Examples
BIB.EX	BIB for the original plus BIB for the latest publication	D 1-5 BIB.EX
CLM.EX	CLM for the original plus CLM for the latest publication	DIS L2 CLM.EX
FP.EX	FP for the original plus FP for the latest publication	D FP.EX 1-
IBIB.EX	IBIB for the original plus BIB for the latest publication	D IBIB.EX 1-3 L5
IMAX.EX	IMAX for the original plus IMAX for the latest publication	D IMAX.EX 1
MAX.EX	MAX for the original plus MAX for the latest publication	DISPLAY L1 1 MAX.EX
STD.EX	STD for the original plus STD for the latest publication	D STD.EX L5 3, 6

Full-Text Browsing

User Request	Example	System Response
DISPLAY BROWSE	=> DISPLAY BROWSE ENTER (L1) OR L#:. ENTER (DIS), ANSWER NUMBERS, OR END:	NOVICE version
D BRO	=> D BRO L1 :	EXPERT version
Answer number(s)	:1-3	display answers 1, 2, and 3 in default format
	:.	display next answer in default format
Answer number(s) and format	:4 HIT	display answer 4 in HIT format
Format only	:TI TX	display title and text of last answer displayed
*Format	:*KWIC	change default to KWIC; no answer displayed
Forward n fields	:F3	move forward 3 fields
Backward n fields	:B1	move backward 1 field
Search forward for a character string	:S GROWTH REGUL	search forward within record for 'growth regul'
	:S	repeat search forward for the current string
Search backward for a character string	:S- ALKANOIC ACID	search backward within record for 'alkanoic acid.'
	:S-	repeat search backward for the current string
End DISPLAY BROWSE	:END =>	exit DISPLAY BROWSE and return to => prompt

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
Accession Number	AN	Y	N
Applicant City (Corporate)	USPA.CTY	Y	Y
Applicant Country (Corporate)	USPA.CNY	Y	Y
Applicant Name (Corporate)	USPA	Y	Y
Applicant State (Corporate)	USPA.ST	Y	Y
Application Country	AC	Y **(2)**	Y
Application Date	AD	Y **(2)**	Y
Application Information	AI	Y **(2,3,4)**	Y
Application Number	AP	Y **(2,3)**	Y
Application Number Group	APPS	Y **(2,3,5)**	N
Application Year	AY	Y **(2)**	Y
Art Unit	ARTU	Y	Y
Author (Inventor)	AU	Y **(6)**	Y
CAS Registry Number (CAS data)	RN	Y **(2)**	N
Citation	CIT	Y **(2,7)**	N
Classification Code (CAS data)	CC	Y	Y
Controlled Term	CT	Y **(2)**	N
CPC Classification	CPC	Y **(20)**	N
CPC, Initial	CPCI	Y **(21)**	N
CPC, Reclassified	CPCR	Y **(21)**	N
CPC Hit Display	CPC.HIT (HITCPC)	Y	Y
CPC Codes Deduplicated for patent family	CPC.UNIQ	Y	Y
Corporate Source (Patent Assignee)	CS	Y **(8)**	Y
Current Main National Patent Classification Code	NCLM	Y	Y
Current National Patent Classification Code, Main and Secondary	NCL	Y	Y
Current Secondary National Patent Classification Code	NCLS	Y	N
Detailed Description	DETD	Y **(9)**	N
Disclaimer Date	DCD	Y	Y
Document Type	DT	Y	Y
Drawing Description	DRWD	Y **(9)**)	N
Examiner Name	EXNAM	Y	Y
Examiner's Field of Search	EXF	Y	Y
Exemplary Claim Text	ECLM	Y	N
Government Interest	GOVI	Y	N
Index Term (CAS data)	IT	Y **(2)**	N
International Patent Classifications, All codes	IPC	Y **(10)**	N
International Patent Classifications, Main and Secondary	IC	Y	Y
Inventor	IN	Y	Y
Inventor Address	INA	N	Y
Inventor Address, City	IN.CTY	Y	Y
Inventor Address, Country	IN.CNY	Y	Y
Inventor Address, State	IN.ST	Y	Y
Inventor Address, ZIP Code	IN.ZIP	Y	Y
IPC First Invention	IPC.F	Y **(10)**	N
IPC, Main	ICM	Y	Y
IPC, Secondary	ICS	Y	Y
IPC Initial Classification	IPCI	Y **(10)**	N
IPC Reclassification	IPCR	Y **(10)**	N
Issue Main National Patent Classification Code	INCLM	Y	Y
Issue National Patent Classification Code, Main and Secondary	INCL	Y	Y

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

Field Name	Field Code	ANALYZE/ SELECT (1)	SORT
Language	LA	Y	Y
Legal Representative	LREP	Y	N
	AG	Y **(11)**	N
Line Count	LN.CNT	N	Y
Number of Claims	CLMN	N	Y
Occurrence Count of Hit Terms	OCC	N	Y
Other Source Chemical Abstracts	OS	Y **(2)**	N
Other Source Patent Number	OSPN	Y **(2,12)**	N
Parent Case Data	PARN	Y **(9)**	N
Patent Assignee	PA	Y	Y
Patent Assignee Address	PAA	N	Y
Patent Assignee Address, City	PA.CTY	Y	Y
Patent Assignee Address, Country	PA.CNY	Y	Y
Patent Assignee Address, State	PA.ST	Y	Y
Patent Assignee Address, ZIP Code	PA.ZIP	Y	Y
Patent Assignee Type	PAT	Y	Y
Patent Assignee, Original	PAO	Y	N
Patent Claim Text	CLM	Y	N
Patent Country	PC	Y **(2)**	Y
Patent Country Group	PCS	Y **(2,13)**	Y
Patent Date	PD	Y **(2)**	Y
Patent Information	PI	Y **(2,3,14)**	Y
Patent Kind	PK	Y	Y
Patent Number	PN	Y **(2,3)**	Y
Patent Number Group	PATS	Y **(2,3,15)**	Y
Patent Number/Kind Code	PNK	Y	Y
Patent Year	PY	Y **(2)**	Y
Priority Country	PRC	Y **(2)**	Y
Priority Date	PRD	Y **(2)**	Y
Priority Information	PRAI	Y **(2,3,16)**	Y
Priority Number	PRN	Y **(2,3)**	Y
Priority Year	PRY	Y **(2)**	Y
Reassignment Agent	RAA	Y	N
Reassignment Company	RAC	Y	N
Reassignment Country	RAC.CNY	Y	Y
Reassignment Date	RAD	Y	N
Reassignment Execution Date	RAXD	Y	N
Reassignment Kind	RAK	Y	N
Reassignment Update Date	RAUP	Y	N
Reference Patent Classification	RPCL	Y **(2)**	N
Reference Patent Country	RPC	Y **(2)**	N
Reference Patent Information	REP	Y **(2,3,17)**	N
Reference Patent Inventor	RPIN	Y **(2)**	N
Reference Patent IPC	RPIC	Y **(2,3)**	N
Reference Patent Number	RPN	Y **(2,3)**	N
Reference Patent Publication Date	RPD	Y **(2)**	N
Reference Patent Publication Year	RPY	Y **(2)**	N
Related Application Country	RLC	Y **(2)**	N
Related Application Date	RLD	Y	N
Related Application Information	RLI	Y **(3,18)**	N
Related Application Number	RLN	Y **(3)**	N
Related Application Type	RLT	Y	Y
Related Application Year	RLY	Y	N
Related Patent Number	RLPN	Y **(3)**	Y
Related Patent Publication Year	RLPY	Y	N
Section Cross-reference (CAS data)	SX	Y	Y
Summary of the Invention	SUMM	Y **(9)**	N
Supplementary Term (CAS data)	ST	Y	N
Term of Patent	PTERM	N	Y

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

Field Name	Field Code	ANALYZE/ SELECT (1)	SORT
Title	TI	Y (default)	Y
Treatment Code	TC	Y **(19)**	Y
Ultimate Owner	UO	Y	Y
Ultimate Owner Standardized	UOS	Y	Y

(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) SELECT HIT and ANALYZE HIT are not valid with this field.
(3) Enter SET PATENT DERWENT at an arrow prompt (=>) to SELECT or ANALYZE patent and application numbers in Derwent format.
(4) Selects or analyzes the application number with /AP appended to the terms created by SELECT.
(5) Selects or analyzes AP, PRN, and RLN and appends /APPS to the terms created by SELECT.
(6) Appends /IN to the terms created by SELECT.
(7) Extracts patent number, publication year with a truncation symbol appended and with /RE appended to the terms created by SELECT.
(8) Appends /PA to the terms created by SELECT.
(9) Appends /BI to the terms created by SELECT.
(10) Selects or analyzes all codes and appends /IPC to the terms created by SELECT.
(11) Appends /LREP to the term created by SELECT.
(12) Appends /PN to the terms created by SELECT.
(13) Selects or analyzes the PC and RPC and appends /PCS to the] terms created by SELECT.
(14) Selects or analyzes the PN and appends /PN to the terms created by SELECT.
(15) Selects or analyzes PN, RPN, RLPN and appends /PATS to the terms created by SELECT.
(16) Selects or analyzes the PRN and appends /PRN to the terms created by SELECT.
(17) Selects or analyzes the RPN and appends /RPN to the terms created by SELECT.
(18) Selects or analyzes the RLN and appends /RLN to the terms created by SELECT.
(19) Appends /DT to the terms created by SELECT.
(20) Select CPC selects all CPCI and CPCR classifications and appends /CPC as a field code.
(21) SELECT appends /CPC.

Sample Records

DISPLAY IMAX

```
ANSWER 1 OF 1  USPATFULL on STN
ACCESSION NUMBER:       2005:44303  USPATFULL  Full-text
TITLE:                  Treatment of bipolar disorders and associated symptoms
INVENTOR(S):            Romano, Steven Joseph, New York, NY, UNITED STATES
                        Giller, Earl L., Madison, CT, UNITED STATES
                        Harrigan, Edmund P., Old Lyme, CT, UNITED STATES
                        Seeger, Thomas F., Mystic, CT, UNITED STATES
PATENT ASSIGNEE(S):     Pfizer Inc (U.S. corporation)

                             NUMBER       KIND    DATE
                        ---------------- ------ --------
PATENT INFORMATION:     US 20050038036     A1   20050217
ULTIMATE OWNER:         PFIZER INC.
ULTIMATE OWNER STANDARD:Pfizer
APPLICATION INFO.:      US 2004-843915     A1   20040512  (10)

                               NUMBER             DATE
                        -------------------     --------
PRIORITY INFORMATION:   US 2003-471450P         20030516 (60)
DOCUMENT TYPE:          Utility
FILE SEGMENT:           APPLICATION
LEGAL REPRESENTATIVE:   PFIZER INC, 150 EAST 42ND STREET, 5TH FLOOR - STOP 49,
                        NEW YORK, NY, 10017-5612

ASSIGNMENT HISTORY FOR  US 20050038036
      <no data available>

NUMBER OF CLAIMS:       13
EXEMPLARY CLAIM:        1
ABSTRACT:


The present invention relates to a method for treatments relating to bipolar
disorder in a mammal, including a human, the treatments including treatment of
rapid-cycling bipolar disorder, treatment of symptoms of bipolar disorder
selected from the group consisting of acute mania and depression, treatment for
effecting mood stabilization; treatment for preventing relapse into bipolar
episodes, and for the treatment of suicidal thoughts and tendencies associated
with bipolar disorder, comprising administering to said mammal an effective
amount of a compound of the formula I:   ##STR1##
or a pharmaceutically acceptable acid addition salt thereof, wherein Ar, n, X,
and Y are as defined.

[0001] This application claims priority under 35 U.S.C. 119 of U.S. Provisional
60/471,450, filed May 16, 2003. The entire contents of the prior application
are incorporated herein by reference.

FIELD OF THE INVENTION

[0002] The present invention relates to the treatment of bipolar disorder in a
mammal, including a human. More specifically, the present invention is directed
to the treatment in a mammal, including a human, of rapid-cycling bipolar
disorder, and for the treatment of symptoms of bipolar disorder, such symptoms
selected from the group consisting of acute mania and depression. The present
invention is also directed to a treatment method for effecting mood
stabilization in a person afflicted with bipolar disorder. The present
invention further relates to a method of preventing relapse into bipolar
episodes in a person afflicted with bipolar disorder. The present invention is
further directed to the treating suicidal thoughts and tendencies in a person
afflicted with bipolar disorder. The present invention also relates to new
therapeutic uses for piperazinyl-heterocyclic compounds of the formula I, as
defined below, for example ziprasidone.
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BACKGROUND OF THE INVENTION

[0003] The piperazinyl-heterocyclic compounds of formula I of this invention are disclosed in U.S. Pat. Nos. 4,831,031 and 4,883,795, both of which are assigned in common with the present application. Certain treatments for such compounds are disclosed in U.S. Pat. Nos. 6,127,373, 6,245,766, and 6,387,904, all of which are also assigned in common with the present application. The patents listed in this paragraph are incorporated by reference in their entireties into the present disclosure.

SUMMARY OF THE INVENTION

[0004] The present invention relates to the use of piperazinyl-heterocyclic compounds of the formula I, as defined below, in methods for the treatment of bipolar disorder in a mammal, including a human. Specifically, the present invention is directed to a method for the treatment in a mammal, including a human, of rapid-cycling bipolar disorder, a method for the treatment of symptoms of bipolar disorder, such symptoms selected from the group consisting of acute mania and depression; a method for a treatment that effects mood stabilization in a person afflicted with bipolar disorder; a method for a treatment that prevents relapse into bipolar episodes in a person afflicted with bipolar disorder; a method for the treatment of suicidal thoughts and tendencies in a person afflicted with bipolar disorder; such treatments comprising administering a pharmaceutically effective amount of a compound of the formula I: ##STR2##

[0005] or a pharmaceutically acceptable acid addition salt thereof, wherein Ar is benzoisothiazolyl or an oxide or dioxide thereof each optionally substituted by one fluoro, chloro, trifluoromethyl, methoxy, cyano, nitro or naphthyl optionally substituted by fluoro, chloro, trifluoromethyl, methoxy, cyano or nitro; quinolyl; 6-hydroxy-8-quinolyl; isoquinolyl; quinazolyl; benzothiazolyl; benzothiadiazolyl; benzotriazolyl; benzoxazolyl; benzoxazolonyl; indolyl; indanyl optionally substituted by one or two fluoro, 3-indazolyl optionally substituted by 1-trifluoromethylphenyl; or phthalazinyl; n is 1 or 2; and X and Y together with the phenyl to which they are attached form quinolyl; 2-hydroxyquinolyl; benzothiazolyl; 2-aminobenzothiazolyl; benzoisothiazolyl; indazolyl; 2-hydroxyindazolyl; indolyl; spiro; oxindolyl optionally substituted by one to three of (C.sub.1-C.sub.3) alkyl, or one of chloro, fluoro or phenyl, said phenyl optionally substituted by one chloro or fluoro; benzoxazolyl; 2-aminobenzoxazolyl; benzoxazolonyl; 2-aminobenzoxazolinyl; benzothiazolonyl; bezoimidazolonyl; or benzotriazolyl.

• • •

[0021] The psychiatric disorders and conditions referred to herein are known to those of skill in the art and are defined in art-recognized medical texts such as the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, American Psychiatric Association, 1994 (DSM-IV), which is incorporated herein by reference in its entirety.

DETAILED DESCRIPTION OF THE INVENTION

[0022] The piperazinyl-heterocyclic compounds of formula I can be prepared by one or more of the synthetic methods described and referred to in U.S. Pat. Nos. 4,831,031 and 4,883,795. U.S. Pat. Nos. 4,831,031 and 4,883,795 are incorporated herein by reference in their entireties.

• • •

[0032] When an active compound of this invention is to be used in a human subject to treat psychiatric conditions whose manisfestations include psychiatric symptoms or behavioral disturbance, the prescribing physician will normally determine the daily dosage. Moreover, the dosage will vary according to the age, weight and response of the individual patient as well as the severity of the patient's symptoms. However, in most instances, an effective

amount for treating the psychiatric conditions described herein, will be a daily dosage in the range from about 0.5 to about 500 mg, more specifically about 10 mg a day to about 200 mg a day, relatively more specifically about 20 mg a day to about 180 mg a day, relatively still more specifically about 30 mg a day to about 170 mg a day, and relatively even more specifically from about 40 to about 160 mg a day, in single or divided doses, orally or parenterally. In some instances it may be necessary to use dosages outside these limits. The receptor binding and neurotransmitter uptake inhibition profile for Ziprasidone, 5-(2-(4-(1,2-benzisothiazol-3-yl)piperazinyl)ethyl)chlorooxindole, was described in The Journal of Pharmacology and Experimental Therapeutics, 275, 101-113 (1995), which is incorporated herein by reference in its entirety. A summary of its affinity for various receptors in the central nervous system tissue is presented in Table 1.

TABLE 1

Ziprasidone

Receptor (Ligand)	
DA D1([.sup.3H]SCH23390)	6.28 + 0.17 (3)
DA D2([.sup.3H]spiperone)	8.32 + 0.04 (6)
DA D3([.sup.3H]raclopride)	8.14 + 0.03 (3)
DA D4[.sup.3 H]spiperone)	7.49 + 0.11 (3)
5-HT2A([.sup.3H]ketanserin)	9.38 + 0.03 (5)
5-HT1A([.sup.3H]-80H-DPAT)	8.47 + 0.05 (4)
5-HT-2C- ([.sup.3H]mesulergine)	8.88 + 0.05 (6)
5-HT1D- ([.sup.3H]-5-HT)	8.69 + 0.04 (6)
Alpha-1 ([.sup.3H]prazosin)	7.98 + 0.03 (3)
Histamine H1 ([.sup.3H]mepyramine)	7.33 + 0.07 (3)
Neurotransmitter Reuptake Blockade:	
Norpinephrine	7.30 + 0.01 (4)
5-HT	7.29 + 0.06 (3)
DA	6.58 + 0.02 (3)

[0033] The following examples illustrate methods of preparing various compounds of formula I.

EXAMPLE 1

[0034] 6-(2-(4-(1-Naphthyl)piperazinyl)ethyl)-benzoxazolone

[0035] A. To a 500 ml three-necked round-bottomed flask equipped with mechanical stirrer and nitrogen inlet were added 200 grams of polyphosphoric acid, 13.51 grams (0.1 mole) of benzoxazolone, and 13.89 g (0.1 mole) of bromoacetic acid. The reaction was heated with stirring at 115° C. for 2.5 hours and poured into 1 kg ice. The mixture was stirred mechanically for 1 hour to form a purple solid, which was then filtered off and washed with water. The solid was slurried with acetone for 30 minutes, a small amount of purple solid filtered off, and the brown filtrate evaporated. The resulting dark brown gum was slurried with 150 ml ethanol for 30 minutes, and the brown solid filtered off and washed with ethanol. This solid has a m.p. of 192°-194° C.

[0036] The solid (6.6 grams, 0.0257 mole) was placed in a 100 ml three-necked round-bottomed flask equipped with magnetic stirrer, dropping funnel, thermometer, and nitrogen inlet and 19.15 ml (0.257 mole) of trifluoroacetic acid added. Triethylsilane (9.44 ml, 0.0591 mole) was added dropwise to the stirring slurry over 30 minutes. The reaction was stirred overnight at room temperature, then poured into 150 grams ice. The mixture was stirred for 15 minutes, and the brown gum filtered off. The gum was dissolved in 100 ml ethyl acetate, and 125 ml cyclohexane added, giving a brown precipitate, which was filtered and washed with cyclohexane. The filtrate was evaporated and the resulting yellow solid slurried with 50 ml isopropyl ether the pale yellow solid was filtered off and dried to give 2.7 g 6-(2-bromoethyl)-benzoxazolone (11% yield for two steps), m.p. 148'-151° C.

[0037] B. To a 100 ml round-bottomed flask equipped with magnetic stirrer,

condenser, and nitrogen inlet were added 0.618 g (2.10 mmol) of N-(1-naphthyl)piperazine 0.472 g (1.95 mmol) of 6-(2-bromoethyl)-benzoxazolone, 0.411 ml (2.92 mmol) of triethylamine, 50 ml ethanol, and a catalytic amount of sodium iodide. The reaction was refluxed for 3 days, cooled, and evaporated to a brown gum. The gum was partitioned between 50 ml water and 75 ml methylene chloride, the pH adjusted with aqueous 1 N sodium hydroxide solution, and a little methanol added to facilitate phase separation. The methylene chloride layer was dried over sodium sulfate and evaporated, then chromatographed on silica gel. Fractions containing the product were combined and evaporated, the residue taken up in ethyl acetate, treated with hydrochloride gas, and the resulting hydrochloride salt of the product filtered off to give the while solid title compound, m.p. 282°-285° C., 213 mg (23% yield).

EXAMPLE 2

[0038] 6-(2-(4-(1-Naphthyl)piperazinyl)ethyl)-benzimidazolone

• • •

EXAMPLE 17

[0100] 6-(4-(2-(3-Benzisothiazolyl)piperazinyl)ethyl)phenyl)benzothiazolone

[0101] To a 100 ml round-bottomed flask equipped with condenser and nitrogen in let were added 1.03 grams (4 mmol) 6-(2-bromoethyl)-benzothiazolone, 0.88 grams (4 mmol) N-benzisothiazolylpiperazine, 0.84 grams (8 mmol) sodium carbonate, 2 mg sodium iodide, and 40 ml methylisobutyl ketone. The reaction was refluxed 36 hours, cooled, filtered, and the filtrate evaporated. The residue was chromatographed on silica gel using ethyl acetate as eluent to afford an oil, which was taken up in methylene chloride and precipitated by addition of ether saturated with HCl. The solid was filtered, washed with ether, dried briefly, washed with a minimal amount of acetone and dried to afford a white solid, m.p. 288°-290° C., 1.44 grams (76.7%).

EXAMPLE A

[0102] A. Following the general procedure for the preparation of 5-(chloroacetyl)oxindole in Example 12A, the following intermediates were prepared from the appropriate oxindoles:

[0103] 5-(chloroacetyl)-1-ethyl-oxindole (81%, m.p. 1570-1590 C., NMR(CDCl.sub.3); 1.30(t,3H), 3.60(s,2H), 3.85(q,2H), 4.70(s,2H), 6.85-8.15(m,2H);

[0104] 5-(chloroacetyl)-1-methyloxindole(C.sub.1, H.sub.10ClNO.sub.2, 92%, m.p. 2010-2020 C.;

[0105] 1(3-chlorophenyl)-5(chloroacetyl)oxindole, 98% m.p. 143°-145° C., NMR(DMSO-d.sub.6): 3.85(br s,2H), 5.10(s,2H), 6.8(d,1H), 7.4-7.6(m,4H), 7.9 (s+d,2H); MS(%): 319(17, 270(100), 179(46), 178(38);

[0106] 1,3-dimethyl-5-(chloroacetyl)oxindole, 97% m.p. 206°-207°

[0107] 5-(chloroacetyl)-spirocyclopentane[1,3']-indolone, 99%, m.p. 203°-204° C.(dec).; NMR(DMSO-d.sub.6): 2.0(brs,8H), 4.95(s,2H), 6.9(d,1H), 7.8(d+s,2H), 10.6(brs, 1H);

[0108] 5-(chloroacetyl)-1,3,3-trimethyloxindole, 82%, m.p. 1820-185° C., NMR(CDCl.sub.3): 1.45(s,6H), 3.25(s,3H), 4.65(s,2H), 6.9(d, 1H), 7.9(s,1H), 8.0(d,1H);

[0109] 6-fluoro-5-(chloroacetyl)oxindole, 96%, m.p. 1780-1800 C.; NMR(DMSO-d.sub.6): 3.5(s,2H), 4.8(d,2H), 6.7-7.2(m,2H), 7.8(d,1H);

[0110] 7-fluoro5-(chloroacetyl)oxindole, 91%, m.p. 1940-1960 C., NMR(DMSO-d.sub.6): 3.68(s,2H), 5.13(s,2H) 7.65-7.9(dd,2H);

[0111] 6-chloro-5-(chloroacetyl)oxindole, 99%, m.p. 206°-207° C.;

[0112] 5-(chloroacetyl)-3,3-dimethyl-6-fluorooxindole, 89%, m.p. 185°-1880 C.;

[0113] 5-(y-chlorobutyryl)oxindole, 84%, oil, MS(%): 239, 237(55);

[0114] 1-ethyl-5-(y-chlorobutyryl)oxindole, 99%, oil, NMR(CDCl.sub.3): 1.2(t,3H), 1.5-2.7(m,5H), 3.0-3.2(m,2H), 3.5-4.0(m,3H), 6.8-7.0(d,1H), 7.9(s,1H), 7.95(d,1H), and

[0115] 5-(y-chlorobutyryl)-7-fluorooxindole, 53%, m.p. 156°-160° C.

EXAMPLE B

[0116] By the same procedure as that used to prepare 5-(2-chlorethyl)oxindole in Example 12B, the following were prepared:

[0117] 5-(2-chloroethyl)-1-ethyloxindole, 93%, m.p. 120°-122° C.; NMR (CDCl.sub.3): 1.30(t,2H), 3.55(s,2H), 3.65-4.0(m,4H), 6.8-7.3(m,3H);

[0118] 5-(2-chloroethyl)-1-methyloxindole, 99%, m.p. 127°-130° C.; NMR (CDCl.sub.3): 3.1(t,2H), 3.2(s,2H), 3.5(s,2H), 3.75(t,2H), 6.8(d,1H), 7.15(s,1H), 7.3(d,1H);

[0119] 5-(2-chloroethyl)-1-(3-chlorophenyl)oxindole, 83%, m.p. 75°-76° C.;

[0120] 5-(2-chloroethyl)-1,3-dimethyloxindole, 58%, m.p. 73°-750 C., NMR CDCl.sub.3): 1.45-1.55(d,3H), 3.03-3.2(t,2H), 3.25(s,3H), 3.30-3.60(q,1H), 3.65-3.90(t,2H), 6.85-6.90(d,1H), 7.15(s,1H), 7.15-7.30(d,1H);

[0121] 5'-(2-chloroethyl)-spiro[cyclopentane-1,3'-indoline]-2'-one, 92%, m.p. 140°-142° C.; NMR(DMSO-d.sub.6): 2.8(brs,8H), 2.90(t,2H), 3.7(t,2H), 6.6-7.1(m,3H), 10.2(brs,1H);

[0122] 5-(2-chloroethyl)-,3,3-trimethyloxindole, 83%, oil;

[0123] 5-(2-chloroethyl)-6-fluorooxindole 62%, m.p. 1880-190° C.; NMR(DMSO-ds) 3.05(t,2H), 3.5(2,2H), 3.85(t,2H), 6.6-7.3(m,2H);

[0124] 5-(2-chloroethyl)-7-fluorooxindole, 79%, m.p. 176°-1790 C.; MS(%); 213(50), 180(20), 164(100), 136(76);

[0125] 5-(2-chloroethyl)-6-chlorooxindole, 94%, m.p. 210°-211° C.;

[0126] 5-(2-chloroethyl)-3,3-dimethyl-6-fluorooxindole (C.sub.12H.sub.13ClFNO, 84%, m.p. 195°-1960 C., NMR(DMSO-d.sub.6): 1.3(s,6H), 3.05(t,2H), 3.7(t,2H), 6.65(d,1H), 7.1(d,1H), 10.1(br s,1H);

[0127] 5-(4-chlorobutyl)oxindole, 40%, oil, NMR(CDCl.sub.3): 1.6-2.0(m,4H), 2.6(m,2H), 3.6(m,4H), 6.8-7.15(m,3H), 9.05(br s, 1H);

[0128] 5-(4-chlorobutyl)-ethyloxindole, 48%, oil, NMR(CDCl.sub.3): 1.25(t,3H), 1.5-1.95(m,4H), 2.6(m,2H), 3.5(s,2H), 3.55(t,2H), 3.75(q,2H), 6.7-7.2(m,3H); and

[0129] 5-(4-chlorobutyl)-7-fluorooxindole, 71%, m.p. 1680-173° C.

What is claimed is:

1. A method for treating rapid-cycling bipolar disorder in a mammal in need thereof comprising administering to said mammal a pharmaceutically effective amount of a compound of formula ##STR5## or a pharmaceutically acceptable

acid addition salt thereof, wherein Ar is benzoisothiazolyl or an oxide or dioxide thereof each optionally substituted by one fluoro, chloro, trifluoromethyl, methoxy, cyano, nitro or naphthyl optionally substituted by fluoro, chloro, trifluoromethyl, methoxy, cyano or nitro; quinolyl; 6-hydroxy-8-quinolyl; isoquinolyl; quinazolyl; benzothiazolyl; benzothiadiazolyl; benzotriazolyl; benzoxazolyl; benzoxazolonyl; indolyl; indanyl optionally substituted by one or two fluoro, 3-indazolyl optionally substituted by 1-trifluoromethylphenyl; or phthalazinyl; n is 1 or 2; and X and Y together with the phenyl to which they are attached form quinolyl; 2-hydroxyquinolyl; benzothiazolyl; 2-aminobenzothiazolyl; benzoisothiazolyl; indazolyl; 2-hydroxyindazolyl; indolyl; spiro; oxindolyl optionally substituted by one to three of (C.sub.1-C.sub.3) alkyl, or one of chloro, fluoro or phenyl, said phenyl optionally substituted by one chloro or fluoro; benzoxazolyl; 2-aminobenzoxazolyl; benzoxazolonyl; 2-aminobenzoxazolinyl; benzothiazolonyl; bezoimidazolonyl; or benzotriazolyl.

2. A method of treating in a mammal in need thereof a symptom of bipolar disorder selected from the group consisting of acute mania, depression, and suicidal thoughts or suicidal tendencies, which method comprises administering to said mammal a pharmaceutically effective amount of a compound of formula ##STR6## or a pharmaceutically acceptable acid addition salt thereof, wherein Ar is benzoisothiazolyl or an oxide or dioxide thereof each optionally substituted by one fluoro, chloro, trifluoromethyl, methoxy, cyano, nitro or naphthyl optionally substituted by fluoro, chloro, trifluoromethyl, methoxy, cyano or nitro; quinolyl; 6-hydroxy-8-quinolyl; isoquinolyl; quinazolyl; benzothiazolyl; benzothiadiazolyl; benzotriazolyl; benzoxazolyl; benzoxazolonyl; indolyl; indanyl optionally substituted by one or two fluoro, 3-indazolyl optionally substituted by 1-trifluoromethylphenyl; or phthalazinyl; n is 1 or 2; and X and Y together with the phenyl to which they are attached form quinolyl; 2-hydroxyquinolyl; benzothiazolyl; 2-aminobenzothiazolyl; benzoisothiazolyl; indazolyl; 2-hydroxyindazolyl; indolyl; spiro; oxindolyl optionally substituted by one to three of (C.sub.1-C.sub.3) alkyl, or one of chloro, fluoro or phenyl, said phenyl optionally substituted by one chloro or fluoro; benzoxazolyl; 2-aminobenzoxazolyl; benzoxazolonyl; 2-aminobenzoxazolinyl; benzothiazolonyl; bezoimidazolonyl; or benzotriazolyl.

3. The method of claim 2 wherein the symptom is selected from the group consisting of acute mania and depression.

4. The method of claim 2 wherein the symptom is suicidal thoughts or tendencies.

5. A method of stabilizing mood or of preventing relapse into a bipolar episode in a mammal afflicted with bipolar disorder, which method comprises administering to said mammal a pharmaceutically effective amount of a compound of formula ##STR7## or a pharmaceutically acceptable acid addition salt thereof, wherein Ar is benzoisothiazolyl or an oxide or dioxide thereof each optionally substituted by one fluoro, chloro, trifluoromethyl, methoxy, cyano, nitro or naphthyl optionally substituted by fluoro, chloro, trifluoromethyl, methoxy, cyano or nitro; quinolyl; 6-hydroxy-8-quinolyl; isoquinolyl; quinazolyl; benzothiazolyl; benzothiadiazolyl; benzotriazolyl; benzoxazolyl; benzoxazolonyl; indolyl; indanyl optionally substituted by one or two fluoro, 3-indazolyl optionally substituted by 1-trifluoromethylphenyl; or phthalazinyl; n is 1 or 2; and X and Y together with the phenyl to which they are attached form quinolyl; 2-hydroxyquinolyl; benzothiazolyl; 2-aminobenzothiazolyl; benzoisothiazolyl; indazolyl; 2-hydroxyindazolyl; indolyl; spiro; oxindolyl optionally substituted by one to three of (C.sub.1-C.sub.3) alkyl, or one of chloro, fluoro or phenyl, said phenyl optionally substituted by one chloro or fluoro; benzoxazolyl; 2-aminobenzoxazolyl; benzoxazolonyl; 2-aminobenzoxazolinyl; benzothiazolonyl; bezoimidazolonyl; or benzotriazolyl.

6. The method of claim 5, for stabilizing mood.

7. The method of claim 5, for preventing relapse into a bipolar episode.

8. The method of any preceding claim wherein the compound is ziprasidone.

9. The method of claim 1, 2, or 5 wherein the compound is ziprasidone and is administered in dosages of about 0.5 mg to about 500 mg per day.

10. The method of claim 1, 2, or 5 wherein the compound is ziprasidone and the administration is oral.

11. The method of claim 1, 2, or 5 wherein the compound is ziprasidone and the administration is parenteral.

12. The method of claim 1, 2, or 5 wherein the treatments effect improvement in the mammal within about 96 hours after administrating the compound.

13. The method of claim 1, 2, or 5 wherein the treatments effect improvement in the mammal within about 24 to about 96 hours after administering the compound.

ISSUE U.S. PATENT CLASSIF.:
  MAIN: 514/253.060
  SECONDARY: 514/254.020; 514/254.060
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  MAIN: 514/253.060
  SECONDARY: 514/254.020; 514/254.060
COOP. PATENT CLASSIF.:
  INITIAL: A61K0031-496 [I]
INT. PATENT CLASSIF.: [7]
  INITIAL: A61K0031-496 [ICM,7]
  RECLASS: A61K0031-496 [I]; A61P0025-00 [I]; A61P0025-24 [I]

CHEMICAL ABSTRACTS INDEXING COPYRIGHT 2013 ACS on STN

	PATENT	KIND	DATE
OS CA 141:420463 * WO	2004100957	A1	20041125

* CA Indexing for this record included
CA CLASSIF.: 1-11 (Pharmacology)
SUPPL. TERM: bipolar disorder treatment piperazinyl heterocyclic compd; ziprasidone treatment acute mania depression mood stabilization; suicide thought treatment ziprasidone
INDEX TERM: Dopamine receptors
(D1, ziprasidone affinity for, in central nervous system tissue; treatment of bipolar disorders and associated symptoms using piperazinyl-heterocyclic compds., especially ziprasidone)
INDEX TERM: Dopamine receptors
(D1A, ziprasidone affinity for, in central nervous system tissue; treatment of bipolar disorders and associated symptoms using piperazinyl-heterocyclic compds., especially ziprasidone)
• • •
INDEX TERM: 50-67-9, 5-HT, biological studies 51-41-2, Norepinephrine
51-61-6, Dopamine, biological studies
(ziprasidone blockade of reuptake of; treatment of bipolar disorders and associated symptoms using piperazinyl-heterocyclic compds., especially ziprasidone)

D CLM.EX

-- Original Publication -- (APPLICATION - A1)

CLM What is claimed is:
1. A method for treating rapid-cycling bipolar disorder in a mammal in need thereof comprising administering to said mammal a pharmaceutically effective amount of a compound of formula ##STR5## or a pharmaceutically acceptable acid addition salt thereof, wherein Ar is benzoisothiazolyl or an oxide or dioxide thereof each optionally

substituted by one fluoro, chloro, trifluoromethyl, methoxy, cyano, nitro or naphthyl optionally substituted by fluoro, chloro, trifluoromethyl, methoxy, cyano or nitro; quinolyl; 6-hydroxy-8-quinolyl; isoquinolyl; quinazolyl; benzothiazolyl; benzothiadiazolyl; benzotriazolyl; benzoxazolyl; benzoxazolonyl; indolyl; indanyl optionally substituted by one or two fluoro, 3-indazolyl optionally substituted by 1-trifluoromethylphenyl; or phthalazinyl; n is 1 or 2; and X and Y together with the phenyl to which they are attached form quinolyl; 2-hydroxyquinolyl; benzothiazolyl; 2-aminobenzothiazolyl; benzoisothiazolyl; indazolyl; 2-hydroxyindazolyl; indolyl; spiro; oxindolyl optionally substituted by one to three of (C.sub.1-C.sub.3) alkyl, or one of chloro, fluoro or phenyl, said phenyl optionally substituted by one chloro or fluoro; benzoxazolyl; 2-aminobenzoxazolyl; benzoxazolonyl; 2-aminobenzoxazolinyl; benzothiazolonyl; bezoimidazolonyl; or benzotriazolyl.

2. A method of treating in a mammal in need thereof a symptom of bipolar disorder selected from the group consisting of acute mania, depression, and suicidal thoughts or suicidal tendencies, which method comprises administering to said mammal a pharmaceutically effective amount of a compound of formula ##STR6## or a pharmaceutically acceptable acid addition salt thereof, wherein Ar is benzoisothiazolyl or an oxide or dioxide thereof each optionally substituted by one fluoro, chloro, trifluoromethyl, methoxy, cyano, nitro or naphthyl optionally substituted by fluoro, chloro, trifluoromethyl, methoxy, cyano or nitro; quinolyl; 6-hydroxy-8-quinolyl; isoquinolyl; quinazolyl; benzothiazolyl; benzothiadiazolyl; benzotriazolyl; benzoxazolyl; benzoxazolonyl; indolyl; indanyl optionally substituted by one or two fluoro, 3-indazolyl optionally substituted by 1-trifluoromethylphenyl; or phthalazinyl; n is 1 or 2; and X and Y together with the phenyl to which they are attached form quinolyl; 2-hydroxyquinolyl; benzothiazolyl; 2-aminobenzothiazolyl; benzoisothiazolyl; indazolyl; 2-hydroxyindazolyl; indolyl; spiro; oxindolyl optionally substituted by one to three of (C.sub.1-C.sub.3) alkyl, or one of chloro, fluoro or phenyl, said phenyl optionally substituted by one chloro or fluoro; benzoxazolyl; 2-aminobenzoxazolyl; benzoxazolonyl; 2-aminobenzoxazolinyl; benzothiazolonyl; bezoimidazolonyl; or benzotriazolyl.

3. The method of claim 2 wherein the symptom is selected from the group consisting of acute mania and depression.

4. The method of claim 2 wherein the symptom is suicidal thoughts or tendencies.

5. A method of stabilizing mood or of preventing relapse into a bipolar episode in a mammal afflicted with bipolar disorder, which method comprises administering to said mammal a pharmaceutically effective amount of a compound of formula ##STR7## or a pharmaceutically acceptable acid addition salt thereof, wherein Ar is benzoisothiazolyl or an oxide or dioxide thereof each optionally substituted by one fluoro, chloro, trifluoromethyl, methoxy, cyano, nitro or naphthyl optionally substituted by fluoro, chloro, trifluoromethyl, methoxy, cyano or nitro; quinolyl; 6-hydroxy-8-quinolyl; isoquinolyl; quinazolyl; benzothiazolyl; benzothiadiazolyl; benzotriazolyl; benzoxazolyl; benzoxazolonyl; indolyl; indanyl optionally substituted by one or two fluoro, 3-indazolyl optionally substituted by 1-trifluoromethylphenyl; or phthalazinyl; n is 1 or 2; and X and Y together with the phenyl to which they are attached form quinolyl; 2-hydroxyquinolyl; benzothiazolyl; 2-aminobenzothiazolyl; benzoisothiazolyl; indazolyl; 2-hydroxyindazolyl; indolyl; spiro; oxindolyl optionally substituted by one to three of (C.sub.1-C.sub.3) alkyl, or one of chloro, fluoro or phenyl, said phenyl optionally substituted by one chloro or fluoro; benzoxazolyl; 2-aminobenzoxazolyl; benzoxazolonyl; 2-aminobenzoxazolinyl; benzothiazolonyl; bezoimidazolonyl; or benzotriazolyl.

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8. The method of any preceding claim wherein the compound is ziprasidone.

9. The method of claim 1, 2, or 5 wherein the compound is ziprasidone and is administered in dosages of about 0.5 mg to about 500 mg per day.

10. The method of claim 1, 2, or 5 wherein the compound is ziprasidone and the administration is oral.

11. The method of claim 1, 2, or 5 wherein the compound is ziprasidone and the administration is parenteral.

12. The method of claim 1, 2, or 5 wherein the treatments effect improvement in the mammal within about 96 hours after administrating the compound.

13. The method of claim 1, 2, or 5 wherein the treatments effect improvement in the mammal within about 24 to about 96 hours after administering the compound.

DISPLAY BIB.EX

ANSWER 1 OF 1 USPATFULL on STN

-- Original Publication -- (APPLICATION - A1)

AN 2005:44303 USPATFULL Full-text
TI Treatment of bipolar disorders and associated symptoms
IN Romano, Steven Joseph, New York, NY, UNITED STATES
Giller, Earl L., Madison, CT, UNITED STATES
Harrigan, Edmund P., Old Lyme, CT, UNITED STATES
Seeger, Thomas F., Mystic, CT, UNITED STATES
PA Pfizer Inc (U.S. corporation)
UO PFIZER INC.
UOS Pfizer
PI US 20050038036 A1 20050217
AI US 2004-843915 A1 20040512 (10)
PRAI US 2003-471450P 20030516 (60)
DT Utility
FS APPLICATION
LREP PFIZER INC, 150 EAST 42ND STREET, 5TH FLOOR - STOP 49, NEW YORK, NY, 10017-5612
CLMN Number of Claims: 13
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 972
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

USPATFULL

DISPLAY SPP

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L1   ANSWER 1 OF 1  USPATFULL on STN

PatentPak PDF | PatentPak PDF+ | PatentPak Interactive
AN     2019:273623  USPATFULL Full-text
TI     Soybean variety 5PCDJ10
IN     Owen, Philip A., Baldwin, IL, UNITED STATES
PA     MONSANTO TECHNOLOGY LLC, St. Louis, MO, UNITED STATES (U.S. corporation)
UO     Monsanto (in: Bayer); BAYER AG
UOS    Monsanto (in: Bayer); Bayer
PI     US 10368520         B1  20190806
AI     US 2018-15988342        20180524 (15)
DT     Utility
FS     GRANTED
LN.CNT 2255
CPC    CPCI   A01H0005-10 [I]; A01H0006-542 [I]
IPC    IPCI   A01H0005-10 [I]; A01H0006-54 [I]
       IPCR   A01H0005-10 [I]; A01H0006-54 [I]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
PPAK
     100-47-0D, Benzonitrile, Pg 20
     290-87-9D, Triazine, Pg 20
     30581-70-5D, Cyclohexanedione, Pg 20
     35724-27-7D, Pg 20
     38669-41-9D, Phenoxypropionic acid, Pg 20
     1071-83-6, Glyphosate, Pg 20
     1689-84-5, Bromoxynil, Pg 20
     1918-00-9, Dicamba, Pg 20
     51276-47-2, Glufosinate, Pg 20
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