

# USPAT / USPATOLD

## US Patents Full-Text

### ■ USPAT Contents:

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### ■ USPAT Coverage:

Utility Patents from 1971

Re-Issued Patents from 1975

Defensive Publications from 1976

Design Patents from 1976

Plant Patents from 1976

Statutory Invention Registrations are covered from 1985

### ■ USPATOLD Contents:

The USPATOLD database contains digitized OCR'd text of US Patents from 1920 to 1973. USPATOLD is charged at the Questel parking file rate, and there are no display charges. Images are not available.

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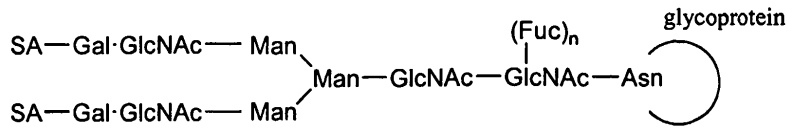
1920 – 1973

■ (US Published Applications may be found in **File USAPPS**)

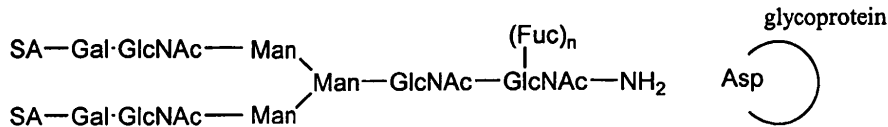
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|-------------------------------|---|
| ■ <b>Number of records:</b>   | More than 4, 087 million records  |
| ■ <b>Updating:</b>            | Weekly  |
| ■ <b>Language of records:</b> | English   |
| ■ <b>Cluster searching:</b>   | The USPAT database is included in the predefined PATENTS database cluster (FILE CL PATENTS or FI CL PATENTS). |
| ■ <b>SDI Profiles:</b>        | Weekly or Monthly   |
| ■ <b>Producer:</b>            | Questel•Orbit   |
| ■ <b>Source:</b>              | United States Patent and Trademark Office (USPTO)   |

# Sample Record (edited)

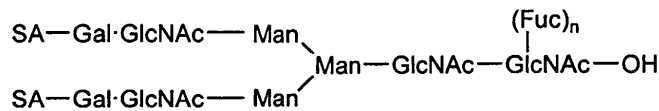
1/1 USPAT - (C) USPTO- image  
CPIM Questel



↓  
PNGase-F



↓  
NH<sub>3</sub>



n = 0 or 1

1/1 USPAT - (C) USPTO- image  
PN - US7368108 B2 20080506  
TI - Glycopeptide remodeling using amidases  
IN - DeFrees, Shawn; North Wales PA [US]  
- Johnson, Karl F.; Willow Grove PA [US]  
PA - Neose Technologies, Inc., Horsham PA [US]  
AP - US10497283 20041105 [2004US-0497283]  
- Prov. AP US60334233 20011128 [2001US-P334233]  
FD - Previous Publication: US20050118672 A1 20050602  
PCT - PCT Ser. No: PCT/US02/38440 [2002WO-US38440],  
Sec. 371(c)(1)(2)(4) Date: 20041105,  
Sec. PCT 102(e) Date: 20041105,  
Filing Date: 20021127,  
PCT Pub. No.: WO03/045980 [WO200345980],  
Pub. Date: 20030605.  
DT - INVENTION (UTILITY) PATENT (with Pre-Grant Publicatin)  
FS - Assigned to U.S. Company or Corporation  
NO - Legal Rep. Firm: Morgan, Lewis & Bockius, LLP  
Primary examiner: Saidha, Tekchand  
Number of Drawings: NDR=2  
Number of Figures: NFG=2  
Number of Claims: NCL=33  
Exemplary Claim Number: ECL=1  
Independant Claim Number: ICL=1,25,30  
Extended under 35 USC 154(b) the following days: EXTD=391  
PCLO- 424094500

PCLX- 435015000 435193000 435252300  
FLD - 424094500 435015000 435068100 435069100 435193000 435252300  
IC - A61K-038/51 C12Q-001/48 A61K-038/43  
CT - Cited by applicant  
US20020150981 20021000 [US20020150981] Canfield  
REF - Cited by examiner  
Kuhn et al. JBC 270(49): 29493-97, Dec. 1995.

PNGase-F amidase sequence from *F. meningosepticum* (Registry Nos. 128688-70-0).

PNGase-F amidase from *F. meningosepticum* (Registry Nos. 128688-71-1).

Cited by applicant

Hayes et al. The Biosynthesis of Oligosaccharides in Intact Golgi Preparations From Rat Liver. Analysis of N-linked and O-Linked Glycans Labeled by UDP-[6-3H]N-Acetylgalactosamine. Journal Biol. Chem. Aug. 5, 1993 vol. 268, No. 22, pp. 16170-16178.

AB - This invention provides methods for modifying glycosylation patterns of glycopeptides, including recombinantly produced glycopeptides. Also provided are glycopeptide compositions in which the glycopeptides have a homogeneous glycosylation pattern.

DRWG- BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 shows exemplary oligosaccharides that can be added to proteins using the methods of the invention.

FIG. 2 shows alternate catalytic pathways for methods of the invention.

MCLM- What is claimed is:

1. An in vitro method of glycosylating a polypeptide comprising an Asn or an Asp residue, the method comprising the steps of contacting the polypeptide with a glycosyl donor molecule having a GlcNAc residue and a PNGase-F amidase under conditions suitable for the linkage of the GlcNAc residue on the glycosyl donor molecule to the Asn or Asp residue on the polypeptide, wherein said PNGase-F amidase comprises at least one amino acid substitution of an amino acid residue for an active site acidic amino acid residue selected from the group consisting of Asp at position 60, Glu at position 206 and Glu at position 118 corresponding to a wild-type PNGase-F amidase sequence (SEQ ID NO:01).

CLM - 2. The method of claim 1, wherein the glycosyl donor molecule is modified with a leaving group at the reducing terminus of the molecule.

3. The method of claim 2, wherein the leaving group is a halogen.

4. The method of claim 3, wherein the halogen is fluoride.

5. The method of claim 2, wherein the leaving group is a Asn, or a Asn-peptide moiety.

6. The method of claim 1, wherein the GlcNAc residue on the glycosyl donor molecule is modified.

7. The method of claim 6, wherein the GlcNAc residue comprises a 1,2 oxazoline moiety.

8. The method of claim 1, wherein the glycosyl donor molecule comprises a bi, tri, or tetra-antennary structure.

9. The method according to claim 1, wherein the glycosyl donor comprises a linkage between GlcNAc and mannose.

10. The method according to claim 1, wherein the glycosyl donor comprises a high mannose N-linked structure.

11. The method according to claim 1, wherein the glycosyl donor comprises mannose-6-phosphate.

12. The method of claim 1, wherein the PNGase-F amidase is attached to a solid support.

13. The method of claim 1, wherein the glycopeptide is reversibly

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BSUM- BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention pertains to the field of methods for remodeling glycopeptide to provide glycopeptides with novel and/or substantially uniform glycosylation patterns.

## 2. Background

### A. Protein Glycosylation

The biological activity of many glycopeptides is highly dependent upon the presence or absence of particular oligosaccharide structures attached to the glycopeptide. Improperly glycosylated glycopeptides are implicated in cancer, infectious diseases and inflammation (Dennis et al., *BioEssays* 21: 412-421 (1999)). Moreover, the glycosylation pattern of a therapeutic glycopeptide can affect numerous aspects of the therapeutic efficacy such as solubility, resistance to proteolytic attack and thermal inactivation, immunogenicity, half-life, bioactivity, and stability (see, e.g., Rotondaro et al., *Mol. Biotechnol.* 11: 117-128 (1999); Lis et al., *Eur. J. Biochem.* 218: 1-27 (1993); Ono et al., *Eur. J. Cancer* 30A (Suppl. 3), S7-S11 (1994); and Hotchkiss et al., *Thromb. Haemost.* 60: 255-261 (1988)). Regulatory approval of therapeutic glycopeptides also requires that the glycosylation be homogeneous and consistent from batch to batch. Glycosylation is a complex post-translational modification that is highly cell dependent. Following translation, proteins are transported into the endoplasmic reticulum (ER), glycosylated and sent to the Golgi for further processing. The resulting glycopeptides are subsequently targeted to various organelles, become membrane components, or they are secreted into the periplasm. During glycosylation, either N-linked or O-linked glycopeptides are formed. N-glycosylation is a highly conserved metabolic process, which in eukaryotes is essential for viability. N-linked glycosylation is also implicated in development and homeostasis; N-linked glycopeptides constitute the majority of cell-surface proteins and secreted proteins, which are highly regulated during growth and development (Dennis et al., *Science* 236:582-585 (1987)). N-glycosylation is also believed to be related to morphogenesis, growth, differentiation and apoptosis (Kukuruzinska et al, *Biochem. Biophys. Acta.* (in press) (1998)).

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### SUMMARY OF THE INVENTION

The present invention provides methods of remodeling the N-linked glycosylation pattern of a glycopeptide. Typically, the methods are carried out by glycosylating a polypeptide which comprises an Asn or an Asp residue. The protein will generally be recombinantly produced and may be first treated chemically or with an appropriate enzyme (e.g., endoglycanase, amidase or protease) to remove existing N-linked carbohydrate structure. The method can also utilize one or more steps in which an appropriate acceptor moiety is ligated onto the peptide structures. The methods of the invention include contacting the polypeptide with an activated glycosyl donor molecule (e.g., a species having a leaving group) under conditions suitable for linking the activated GlcNAc residue on the glycosyl donor molecule to an Asn or Asp residue on the polypeptide. If desired, the glycosylation pattern of the peptide produced using the method of the invention can be further elaborated using glycosylation according to the methods set forth herein, or known in the art.

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### DESC- DETAILED DESCRIPTION OF THE INVENTION AND THE PREFERRED EMBODIMENTS

#### Definitions

The following abbreviations are used herein:

Ara=arabinosyl;

Fru=fructosyl;

Fuc=fucosyl;

Gal=galactosyl;

GalA=galacturonyl;

GalNAc=N-acetylgalactosaminyl;

Glc=glucosyl;

GlcNAc=N-acetylglucosaminyl;

Man=mannosyl;  
NeuAc=N-acetylneuraminyl.  
NeuGc=N-glycolylneuraminyl;  
Xyl=xylosyl.

/.../

SEQL-

SEQUENCE LISTING

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-- <200> SEQUENCE CHARACTERISTICS:
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-- <213> ORGANISM: Flavobacterium meningosepticum
-- <400> SEQUENCE: 1
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-- 20 25 30
-- Phe Pro Ala Asp Val Thr Thr Val Lys Thr Ile Lys Met Phe Ile Lys
-- 35 40 45
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-- Tyr Gly Lys Ala His Thr Leu Gly Leu Lys Lys Asn Ile Gln Leu Pro
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-- Gln Leu Gly Ala Leu Gly Cys Ser Ala Asn Pro Ile Asn Asn Gln Ser
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-- 245 250 255
-- Val Pro Thr Arg Ile Asp Val Leu Asn Asn Ser Leu Thr Gly Ser Thr
-- 260 265 270
-- Phe Ser Tyr Glu Tyr Lys Phe Gln Ser Trp Thr Asn Asn Gly Thr Asn
-- 275 280 285
-- Gly Asp Ala Phe Tyr Ala Ile Ser Ser Phe Val Ile Ala Lys Ser Asn
-- 290 295 300
-- Thr Pro Ile Ser Ala Pro Val Val Thr Asn
-- 305 310
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CASE- CROSS REFERENCE TO RELATED APPLICATIONS

The present application is a U.S. National Phase Application of PCT/US02/38440 filed Nov. 27, 2002, which claims priority from U.S. Provisional Application No. 60/334,233 filed Nov. 28, 2001, the disclosures of which are hereby incorporate by reference in their entirety.

## Searching

**Basic Index includes TI, AB, DRWG, MCLM, CLM, BSUM, DESC, DESX, GI, CASE**

Search by	Index	Search Hints	Examples
Terms from the Basic Index	/BI (default)	All Basic Index terms may be searched unqualified to an index.  For all these indexes, search by: - single terms using Boolean or proximity operators.  - phrases using implied adjacency, limited, unlimited, left-hand truncation is available.	ARYLTHIAZ+ AND DERIVATIVES  ARYLTHIAZ+ 2W DERIVATIVES  ARYLTHIAZ+ DERIVATIVES  +SYNTHETIC+
Title	/TI	Terms in titles	/TI ARYLTHIAZ+ AND DERIVATIVES
Basic Abstract	/AB	Terms in abstracts	/AB DNA AND PROTEIN
Drawings	/DRWG	Drawing description terms	/DRWG (MOBILE OR BASE) W STATION
Main Claim	/MCLM /ECL	Terms in the main claim	/MCLM CHECKWORD TRANSLATOR
Claims	/CLM	Terms in additional claims. Use proximity operators W,D,S,P or implied adjacency	/CLM CHECKWORD 2D TRANSLATOR
Descriptions	/DESC	Terms in descriptions	/DESC CONTROL S CIRCUITS
Examples	/DESX	Examples of the invention. From 05/2005 forward. Use the "S" operator to search within each example. The examples are included in any print format that includes the DESC.	/DESX HEXANE S COLLOIDAL
Government Interest	/GI	Indicates US government funding/licensing opportunities.  Search using single terms or for the presence of the field.	/GI FEDERALLY W SPONSORED LICENS+ /GI  GI=YES
Case	/CASE	Search attorney docket number	/CASE RELATED APPLICATIONS  /CASE CE01423R



## Application Data

Search by	Index	Search Hints	Examples
Application number	/AP (or /APC)	<ul style="list-style-type: none"> <li>Search using the number in the format: YYYYUS-NNNNNNN</li> <li>YYYY= 4-digit application year NNNNNNN= application number</li> <li>Search by application date in the format: YYYYMMDD YYYYMM YYYY</li> </ul>	/AP 1998US-0072581 /AP 72581 US072581/AP  19960326/AP 199603/AP 1996/AP
Application country	/APC (or /AP)	Search by application country	US/APC US/AP
Application country	/APC (or /AP)	Search by ISO country code	/APC US /APC US L 1998
Rangeable Application date	/APD (or /APPR)	Search by application date or date range  Search in the format: YYYY-MM-DD YYYY-MM YYYY  Use numeric operators: =, <, >, <=, >=.	APD=1989-04-07 APD=1998-01:1998-06 APD>=1989  Do not use this field to link (L) with the AP (APC) field.
Filing Details	/FD (or /RL)	Search filing details	US5728850/FD
Standardized Application Number	/XAP	To facilitate crossfile searching with other patent databases, Questel-Orbit has created a standardized application number which can be extracted with the MEM command and then reused as a search term with the *MEM command.	MEM /XAP  *MEM /XAP

## Priority Data

Search by	Index	Search Hints	Examples
Priority number	/PR	<ul style="list-style-type: none"> <li>• Search using the number in the format: YYYYCC-NNNNNNN</li> <li>YYYY= 4-digit priority year CC= ISO country code NNNNNNN= priority number</li> <li>• Search by priority date in the format: YYYYMMDD YYYYMM YYYY</li> </ul>	/PR 1996JP-0003009  /PR 1995FR-0008849  19960326/PR 199603/PR 1996/PR
Priority country	/PRC (or /PR)	Search by ISO country code.	/PRC JP /PRC JP L 1997
Priority date	/PRD	Search in the format: YYYY-MM-DD YYYY-MM YYYY  Use numeric operators: =, <, >, <=, >=.	PRD=1998-02-25 PRD=1998-01:1998-06 PRD>=1997  Do not use this field to link (L) with the PR (PRC) field.
Standardized Priority Number	/XPR	To facilitate crossfile searching with other patent databases, Questel-Orbit has created a standardized priority number which can be extracted with the MEM command and then reused as a search term with the *MEM command.	MEM /XPR  *MEM /XPR

## PCT Information

Search by	Index	Search Hints	Examples
PCT Information	/PCT /PPN	Search for the PCT publication	/PPN WO9617278
	/PPND	Search for PCT publication date	/PPND
PCT Application Information	/PAP	Search for the PCT application number	/PAP 1995WO-GB02784
	/PAPD	Search for PCT application filing date	/PAPD
PCT National Stage 317	/PPD1	PCT filing date	/PPD1 1998-02-09
PCT National Stage 102	/PPD2	Date filing enters US National Stage	/PPD2 1998-02-09
PCT National Stage 103	/PPD3	Date of US application	/PPD3 1996-07-24

## Citation Information

Search by	Index	Search Hints	Examples
Cited Patents	/CT	Search by publication number	/CT US5272338
		Use MEM /XCT for crossfile searching	/CT WO9302065
Cited US Classes	/CTCL	Cited US Classes	549510000/CTCL 549510/CTCL 549/CTCL
Cited International Classes	/CTCL	Search using the IPC code	G06F-007/06/CTIC G06F-007/CTIC G04F/CTIC

## Assignee, Inventor, Representative and Examiner Data

Patent Assignee	/PA (or AR)	<p>Search for patent assignee and address information. Search by:</p> <ul style="list-style-type: none"> <li>-single terms using search operators and truncation</li> <li>-full name using implied adjacency</li> </ul> <p>/PAN searches patent assignee name as a bound phrase (use comma "," to separate the individual's last name from the first name)</p> <p>With the NBR, MEM and MEMS commands, use the /PAN index. Use GET PAN for statistical analysis</p>	<p>/PA UNIV+ AND FLORIDA</p> <p>/PA SONY</p> <p>/PA SONY ELECTRONICS</p> <p>NBR /PAN SMITH FIBERGLAS PRODUCTS</p> <p>NBR /PAN SMITH, F</p>
Patent Assignee	/PAW	<p>Search for patent assignee information only. Search by:</p> <ul style="list-style-type: none"> <li>-single terms using search operators and truncation</li> <li>-full name using implied adjacency</li> </ul>	<p>/PAW 3M</p> <p>/PAW HESS D+</p> <p>/PAW BAILEY PAUL</p>
Patent Assignee Country	/PAC	<p>Search for assignee country using the standard ISO 2-letter code or country name</p> <p>Use MEMS /PAC for statistical analysis</p>	<p>US/PAC</p> <p>JP/PAC JAPAN/PAC</p>
Patent Assignee State	/PAS	<p>Search for assignee state</p> <p>Use MEMS /PAS for statistical analysis</p>	<p>FLORIDA/PAS FL/PAS</p>
Inventor	/IN	<p>Search for inventor by:</p> <ul style="list-style-type: none"> <li>- single terms or groups of words from the inventor name</li> <li>- full name using implied adjacency</li> </ul> <p>Use /INN to search full inventor name as a bound phrase (use comma "," to separate the last name from the first name)</p>	<p>/IN POCIUS AND ALPHONSUS</p> <p>NBR /INN CURTIS, JOHN</p>

## Assignee, Inventor, Representative and Examiner Data (contd.)

Inventor Country	/INC	Search for inventor country by the standard ISO country code	JP/INC JAPAN/INC
Inventor State	/INS	Search for inventor state  Use MEMS /INS for statistical analysis	VA/INS VIRGINIA/INS

## Classification Codes

Search by	Index	Search Hints	Examples
US Patent Classification	/PCL	<p>Search the PCLO and PCLX fields simultaneously.</p> <p>Search the original US classification on 9 or 12 characters in the format: MMMSSDDDDAAA.</p> <ul style="list-style-type: none"> <li>- MMM= three digit main class</li> <li>- SSS= three digit subclass or DIG for digest</li> <li>- DDD= three digits</li> <li>- AAA= one to three alpha-characters</li> </ul> <p>You can search on:</p> <ul style="list-style-type: none"> <li>- the class (3 characters),</li> <li>- the "digest" including the DIG notice,</li> <li>- the full code (ending with 3 digits (DDD) and 3 alphanumeric characters (AAA)).</li> </ul> <p>Range searching: Format: NNNDIG:NNN999999Z, (NNN represents the first 3 digits of the class, DIG indicates the "digest", 999999 represents the last possible sub-class and Z is an optional character from the sub-class).</p>	<p>526196000/PCL</p> <p>526/PCL</p> <p>548DIG:548999999z/pcl</p> <p>548201:548300000/pcl</p>
US Patent Classification Main/Primary Class	/PCLO	Search using main patent class	526196000/PCLO
US Patent Classification Cross-Reference/ Secondary Classes	/PCLX	Search by secondary class applied by the USPTO.	526196000/PCLX 526/PCLX

## Classification Codes (contd.)

Filing Details	/FD	Provides information such as whether one patent is based upon another or is a division of another.	/FD AU9862552 /FD AT
International Patent Classification Codes	/IC ( /IC1 or /ICM  /IC2 or /ICS)	IPC codes are assigned to patent documents by the issuing patent offices. Searchable from 1970 in the format ANNA-NNN/NN. Searchable since 1992 also searchable in the format ANNA-NNN/nnnn (where n is a variable number of digits up to four) The generic levels are separately searchable without truncation.  IC : both main and Secondary IPC  IC1 (or ICM): Main IPC  IC2 (or ICS): Secondary IPC	C07C-067/02/ic C07C-067/ic C07C/ic  C07C-067/02/ic1 C07C-067/ic1 C07C/ic1  C07C-067/02/ic2 C07C-067/ic2 C07C/ic2

## Notes Field

Representative	/REP (or /RP)	Search for representative name with: -single terms using search operators and truncation -full name using implied adjacency  /REPN searches representative name as a bound phrase (use comma (,) to separate the individual's last name from the first name)  With the NBR, MEM and MEMS commands, use the /REPN index. Use MEMS /REPN for statistical analysis.	/REP MCDERMOTT AND EMERY  /REP MCDERMOTT WILL EMERY  NBR /REPN MCDERMOTT  NBR /REPN EDWARDS, R
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## Notes Field (contd.)

Examiner	/EX (or /EXA,/EXP)	Search for examiner name With: -single terms using search operators and truncation -full name using implied adjacency  /EXN searches representative name as a bound phrase (use comma "," to separate the individual's last name from the first name).  With the NBR, MEM and MEMS commands, use the /REPN index. Use MEMS /REPN for statistical analysis.	TON/EX  /EX SMITH AND OLMS  /EX TON DANG  NBR /EXN TON, D
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Number	/NUM	Contains the number of drawings, figures, claims, art units.  NDR: Drawings NFG: Figures NCL: Claims ECL: Exemplary Claims ART: Art Unit	NDR=5 NFG=12 NCL=23 ECL=1 ART=275
Disclaimer Date	/DCD (or /DD)	Search the disclaimer date  Rangeable Use numeric operators: =, <, >, <=, >=.	/DCD=2009:2010  /DCD=2001  /DCD>=2009-01-06

## Other Indexes

Update codes	/UP	Search in the format YYYY-WW.  SDIs default to the UP field.	/UP 1999-04 /UP 2000-01
	/UP4	Monthly update (new documents added in a calendar month)	/UP4 2001-03

## Other Indexes (contd.)

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File Segment	/FS (or /TYP)	Search the Indicates year of publication	/FS FOREIGN COMPANY
Document type	/DT	Search using the document type: DESIGN PLANT REISSUE Statutory Invention Registration UTILITY	DESIGN/DT PLANT/DT REISSUE/DT SIR/DT UTILITY/DT
Other Patent References	/REF	Search for literature references (magazine titles, volume number etc.)	/REF SYSTEM W SPECIFICATION

## Crossfile Searching with other Patent Databases

Search by	Index	Search Hints	Examples
Standardized application number	/XAP	Application number in the World Patent Index format. Enables crossfile searching with other Questel patent databases.	MEM /XAP *MEM /XAP
Standardized citation number	/XCT	Citation number in the World Patent Index format. Enables crossfile searching with other Questel patent databases.	MEM /XCT *MEM /XCT
Standardized publication number	/XPN	Publication number in the World Patent Index format. Enables crossfile searching with other Questel patent databases.	MEM /XPN *MEM /XPN
Standardized priority number	/XPR	Priority number in the World Patent Index format. Enables crossfile searching with other Questel patent databases.	MEM /XPR *MEM /XPR

## Statistical Analysis

- To perform statistical analysis, use the **GET** command with the appropriate field qualifier:

Patent Assignee: GET PA or GET PAN  
Assignee Country: GET PAC  
Assignee State: GET PAS

Publication Country: GET PC  
Application Country: GET APC  
Priority Country: GET PRC

Publication Date: GET PD or GET PY  
Application Date: GET APD or AP  
Priority Date: GET PRD or PR

Inventor: GET IN or GET INN  
Inventor Country: GET INC  
Inventor State: GET INS

Representative Name: GET REPN  
GET REP

Examiner Name: GET EXN

IPC Classification: GET IC  
US Classification: GET PCL  
US Classification-Main: GET PCLO

## Current Awareness – SDI Profiles

It is possible to setup SDI (Current Awareness) profiles in the USPAT database by using the SDI command after the search strategy has been created in the database. The created SDI profiles will be automatically run against each new update to the database and the results will be sent either via postal mail or email (if specified).

**General Syntax:** SDI <SDIname>  
SDI<SDIname><EMAIL>;SURV<updatecode>;PR ormat>;<options>

**Specific Update Syntax:** SDI <SDIname>; SURV <update code field>

SURV UP SDI <SDIname>; SURV UP to survey last update to the database(s)  
SURV UP4 SDI <SDIname>;SURV UP4 to survey all records added to file in a  
calendar month (Monthly update feature)

**Parameters:**  
EMAIL SDI <SDIname> EMAIL to receive SDI results via email  
RTF SDI <SDIname> EMAIL RTF to include special characters, accents etc.  
Example : PR <format> SDI <SDIname> EMAIL RTF;PR ABST to specify record display format

# Document Display

## Super Indexes

APPR	AP PR
PNPD	PN FD
PNRL	PN FD

## FORMAT

## FIELDS

STDR	PN TI IN PA AP PR FD PCT DT FS PCLO PCLX IC
TEST	TI PCLO PCLX FLD IC
TR	TI PCLO PCLX FLD IC
MAX	PN TI IN PA AP PR FD PCT DT FS NO PCLO PCLX FLD IC CT REF AB DRWG MCLM CLM
FULL	PN TI IN PA AP PR FD PCT DT FS NO PCLO PCLX FLD IC CT REF AB DRWG MCLM CLM
FU	PN TI IN PA AP PR FD PCT DT FS NO PCLO PCLX FLD IC CT REF AB DRWG MCLM CLM
ALL	PN TI IN PA AP PR FD PCT DT FS NO PCLO PCLX FLD IC CT REF AB DRWG MCLM CLM GI BSUM DESC CASE
FTXT	PN TI IN PA AP PR FD PCT DT FS NO PCLO PCLX FLD IC CT REF AB DRWG MCLM CLM GI BSUM DESC CASE
SCAN	TI IN PA
SC	TI IN PA
BIB	PN TI IN PA DT FS NO AP PR FD PCT CT REF
MAFX	PN AB DRWG MCLM CLM GI BSUM DESC CASE
MAXF	PN AB DRWG MCLM CLM GI BSUM DESC CASE
ABST	PN TI IN PA AP PR AB
CLMS	PN MCLM CLM
MAIN	PN TI IN PA AP PR FD PCT DT FS NO PCLO PCLX FLD IC CT REF AB DRWG MCLM

● “Standardized Number” (XPN, XAP, XPR), fields are not included in any display format. To display these items enter the field name with the PRT command:

Example: PRT XPR or PRT MAX PLUS XPR

## List of Fields

All these fields may be used with the PRT, LI, BR and =YES commands.

AB	Basic Abstract
AN	Accession Number
AP	Application Data
APD	Application Date
BSUM	Brief Summary
CASE	Parent Case
CLM	Additional Claims
CT	Cited Patents
CTCL	Cited US Classes
CTIC	Cited Intl Classes
DCD	Disclaimer Date
DESC	Detailed description
DESX	Examples
DRWG	Drawings
DT	Document type
EX	Examiner Information
FD	Filing Details
FLD	Field of Search
FS	File Segment
GI	Government Interest
IC	International Patent Classification Codes
IC1	Main IPC Codes
IC2	Secondary IPC Codes
IN	Inventor and Address Information
INC	Inventor Country
INN	Inventor Name
INS	Inventor State
MCLM	Main Claim
NO	Notes

NUM	Number of drawings, figures, claims, art units
PA	Patent Assignee and Address Information
PAC	Patent Assignee Country
PAN	Patent Assignee Name
PAP	PCT Application
PAPD	PCT Application Date
PAS	Patent Assignee State
PAW	Patent Assignee Name only
PCLO	Original Patent Class
PCLU	Unexamined Patent Class
PCLX	Related Patent Class
PCT	PCT Information
PD	Patent Issue Date
PN	Patent Number
PPD1	PCT National Stage 371
PPD2	PCT National Stage 102
PPD3	PCT National Stage 103
PPN	PCT Publication
PPND	PCT Patent Date
PR	Priority Number
PRD	Priority Date
PREF	Patent References
REF	Other Patent References
REP	Representative Names
REPN	Representative Name
TI	Title
UP	Update Codes
XAP6	Standardized Application Number
XAP7	Standardized Application Number
XCT	Standardized Citation Number
XPN	Standardized Patent Number
XPR	Standardized Priority Number

## Searching USPATOLD

### Basic Index

Search by	Index	Search hints	Examples
Terms in the Basic Index	/BI (default)	All Basic Index terms may be searched unqualified to an index.  For all these indexes, search by: - single terms using Boolean or proximity operators.  - phrases using implied adjacency, limited,unlimited, left-hand truncation is available.	TABLESPACE?  REORGAN+ PROCESS
Title	/TI	Terms in titles search by: - single terms using Boolean or proximity operators.	/TI RESTARTABLE 3W TABLESPACE
OCR'd data Abstract, Claims and Descriptions	/OCR'D	- phrases using implied adjacency, limited,unlimited, left-hand truncation is available.	/OCR'D NON?? SORTING W TECHNIQUE

#### The following fields are searched as in USPAT

- Assignee
- Inventor
- Publication, Application and Priority Numbers
- Publication Application and Priority Dates
- International Classifications
- US Classifications

For a list of fields and formats specific to USPATOLD please see the following page.

## Document Display in USPATOLD

Formats										
Fields	SCAN (or SC)	TEST (or TR)	CLMS	ABST	DOC	BIB	STDR	MAIN	MAXF (or MAFX, TEXT)	MAX (or FULL, FU, ALL, FTXT)
AP				✓	✓	✓	✓	✓		✓
DT					✓	✓	✓	✓		✓
IC		✓					✓	✓		✓
IN	✓			✓	✓	✓	✓	✓		✓
NO			✓			✓		✓		✓
OCRD			✓						✓	✓
PA	✓			✓	✓	✓	✓	✓		✓
PCLO		✓					✓	✓		✓
PCLX		✓					✓	✓		✓
PN			✓	✓	✓	✓	✓	✓	✓	✓
PR				✓	✓	✓	✓	✓		✓
PY	✓	✓								
TI	✓	✓		✓	✓	✓	✓	✓		✓

## List of Fields - USPATOLD

All these fields may be used with the PRT, LI, BR and =YES commands.

AN	Accession Number
AP	Application Number
APD	Application Date
DT	Type of Document
IC	International Classificaiton
IN	Inventor
NO	Number of pages in the document
OCRD	Optical Character Read Data
PA	Assignee
PCLO	US Original Classification
PCLX	US Cross referenced Classificaiton
PD	Publication Date
PN	Publication Number
PR	Priority Number
PRD	Priority Date
PY	Publication Year
TI	Title
XAP	Standardized Application Number - Crossfile searching
XPN	Standardized Publication Number - Crossfile searching

