LMARPAT[SM]

Subject Coverage

- Markush patents covered in CAplus[SM]
- Organo or organometallic molecules
- Polymers not included

File Type

Markush Structure, Training

Features

Thesaurus	None				
Alerts (SDIs)	None				
CAS Registry Number® Identifiers	☑	Page Images	☐	STN® AnaVist™	☐
Keep & Share	☑	SLART	☐	STN Easy®	☐
Learning Database	☑	Structures	☑		

Record Content

- Markush structures found in the claims and often the disclosure of the patent, bibliographic information, patent family information, cited references
- In-depth substance and subject indexing including CAS Registry Numbers®, and an abstract, all of which are displayable
- The structures are searchable
- Document information can be searched in CA[SM] and CAplus

File Size

569 records (02/16)

Coverage

Selected Markush structure records for patents found in CAplus with the patent publication year of 1988-1989

Updates

None

Language

English

Database Producer

Chemical Abstracts Service
2540 Olentangy River Road
P.O. Box 3012
Columbus, Ohio 43210-0012 USA
Phone: 800-753-4227 (North America)
Phone: 614-447-3700 (worldwide)
Fax: 614-447-3751
Email: help@cas.org
Copyright Holder

Sources	Selected Markush patents found in CAplus
User Aids	• Online Helps (HELP DIRECTORY lists all help messages available) • STNGUIDE
Clusters	• LEARNING STN Database Clusters Information (PDF).
Related Databases	MARPAT
Pricing	Enter HELP COST at an arrow prompt (=>).

SEARCH and DISPLAY Field Codes

There are no fields that allow left truncation.

Search Field Name	Search Code	Search Examples	Display Codes
Basic Index (contains single words from the textual information associated with the Markush structures) **(1)**	None (or /BI)	S MESO S PHARMACEUT? (L) SALT#	MSTR
Accession Number Entry Date **(2)** Update Date **(2)**	/AN /ED /UP	S 118:93622/AN S 19990305/ED S L1 AND UP>=19990100	AN Not displayed Not displayed

(1) Only structure-related text terms are included; terms from the CAplus Basic Index are not searchable.
(2) Numeric search field that may be searched using numeric operators or ranges.

Structure Search Terms

Novice SEARCH provides prompts to allow you to modify some query attributes, e.g., MLEVEL, before search is run.

Term	Search Examples
L-number of a structure built using the STRUCTURE command or uploaded from STN Express **(1)**	SEARCH L1 CSS FUL S L2 S L7 SUBSET=L5

(1) The L-number answer set from a structure search may be combined with text terms, e.g., S L6 AND SALTS.

Types of Structure Searching

Novice SEARCH provides prompts to allow you to modify some query attributes, e.g., MLEVEL, before the search is run.

Type	Definition	Search Code	Search Examples
Substructure (default)	Search for substances that match the query. Substitution is allowed at all open positions.	SSS	SEARCH L1 SSS FUL S L2
Closed Substructure	Search for substances that match the query exactly. Substitution is allowed at positions opened by CONNECT.	CSS	SEARCH L1 CSS FUL SEA L4 CSS SUB=L2

Scopes of Structure Searches

Novice SEARCH provides prompts to allow you to modify some query attributes, e.g., MLEVEL, before the search is run.

To create an L-number answer set containing candidate structures that have passed the screening step of your structure search, enter EXTEND on the search command line or enter SET EXTEND ON or SET EXTEND ON PERM at an arrow prompt (=>). For details, enter HELP SET EXTEND at an arrow prompt.

Scope	Definition	Search Code	Search Examples
Sample (default)**(1)**	Search a fixed 5% of the file	SAM	SEARCH L1 SAM SSS
Full	Search 100% of the file	FUL	S L5 SSS FUL
Range	Search a user-specified portion of the file	RAN	S L4 RAN=(V117,)
Subset Sample	Search a fixed sample of an answer set created by a search in MARPAT	SUB SAM	S L7 CSS SUB=L5 SAM
Subset Range	Search a user-specified portion of an answer created by a search in MARPAT	SUB RAN RAN=(V118)	S L3 SUB=L2
Subset Full	Search 100% of an answer set created by a search in MARPAT	SUB FUL	S L8 SUB=L6 FUL

(1) EXTEND is not valid with SAMPLE.

DISPLAY Formats

Any combination of formats may be used to display answers. Multiple codes must be separated by spaces or commas. The fields are displayed in the order requested, e.g., D TI AU. The PRINT command is not valid in MARPAT. The default Generic Group display (expanded form) has GTEXT set to ON. To use the compact form, enter SET GTEXT OFF at an arrow prompt (=>).

Hit-term highlighting is available in the AN and MSTR fields. MARHIGHLIGHT must be ON during SEARCH in order to use HIT, FHIT, FQHIT, and QHIT formats.

Format	Content	Examples
AB	Abstract Text	D AB
AI (AP) **(1)**	Patent Application Information	D AI PI
AI.B (AP.B) **(1)**	Patent Application Information, Basic	D AI.B
AN	Accession Number	DISPLAY L2 1-10 AN HIT
ANPL	AN and CAplus Accession Number	D ANPL
CC	CA Classification Code (CA section and section cross-references)	D CC
CT **(2)**	Controlled Term	D CT
CYA **(2)**	Country of Author	D CYA
CYC (CY.CNT) **(2)**	Patent Country Count	D CYC
DS **(2)**	Designated States	D PI DS
DS.B **(2)**	Designated States, Basic	D DS.B
DT (TC)	Document Type	D DT
FS **(2)**	File Segment (Section Group)	D FS
GI **(3)**	Graphic Image or Graphic Image Information	D GI
ICA	Additional or Supplementary IPC	D 2-10 ICA
ICI	Index or Complementary IPC	D 5 8 ICI
ICM	Main IPC	D ICM
ICS	Secondary IPC	D ICS
IN (AU)	Inventor Name	D IN
ISN **(2)**	International Standard (Document) Number	D ISN
IT **(4)**	Index Term and CAS role	D AN IT
LA	Language	D LA
MSTR	All Markush structures and related text	D AN MSTR
MSTR(n) **(2)**	Markush structure n and its related text	D AN MSTR **(1)**
NCL	National Patent Classification	D NCL
OS	Other Source	D OS

DISPLAY Formats (cont'd)

Format	Content	Examples
PA (CS)	Patent Assignee	D PA
PI **(1)**	Patent Information Table	D TI PI
PI.B (PN.B) **(1,2)**	Patent Information, Basic	D PI.B
PN	Patent Number	D PN
PNC (PN.CNT) **(2)**	Patent Number Count	D PNC
PNK	Patent Number/Kind Code	D PNK
PNK.B	Patent Number/Kind Code, Basic	D PNK.B
PRAI (PRN) **(1)**	Priority Application Information	D AI PRAI
PRAI.B (PRN.B)**(1)**	Priority Application Information, Basic	D PRAI.B
PY **(2)**	Publication Year	D PY
PY.B **(2)**	Publication Year, Basic	D TI PY.B
RE **(3)**	Cited References	D TI RE
RETABLE **(2,3)**	Cited References Table	D TI AU RETABLE
RE.CNT (REC) **(3)**	Citing Document's Reference Count	D REC
RL **(4)**	Index Term and CAS role	D RL
RN **(2)**	CAS Registry Numbers	D AN RN
SO	Source	D TI AU SO
ST	Supplementary Term (CA keyword)	D ST
SX **(2,5)**	CA Section Cross-Reference Code	D TI SX
TI	Title of Document	D TI MSTR
ABS	GI, AB	D ABS
ALL **(1,4)**	AN, TI, IN, PA, SO, DT, LA, NCL, CC, FAN.CNT, PI, PRAI, OS, GI, AB, ST, IT, RL, RE.CNT, RE, MSTR	D L2 1-7 ALL
APPS **(1)**	AI, PRAI	D APPS
APPS.B **(1)**	AI.B, PRAI.B	D APPS.B
BIB **(1)**	AN, TI, IN, PA, SO, DT, LA, FAN.CNT, PI, PRAI, OS, RE.CNT (BIB is the default)	D 1-3 BIB HIT
CAN	List of CA Abstract Numbers (no L-number header)	D CAN
CBIB	AN, plus Compressed Bibliographic Data	DISPLAY L1 1 CBIB
DALL **(1,4)**	ALL, delimited for post-processing	D DALL
DMAX **(1,4)**	MAX, delimited for post-processing	D MAX
FAM **(1)**	AN, FAN.CNT, PI for the accession number, plus PI for other family accession numbers	D FAM
FAN	Family Accession Number (AN, FAN.CNT, FAN)	D FAN
FBIB **(1)**	BIB plus PI for other family accession numbers	D FBIB
IABS	ABS, with text labels	D IABS
IALL **(1,4)**	ALL, indented with text labels	D IALL
IBIB **(1)**	BIB, indented with text labels	D IBIB
IC	International Patent Classification, Main and Secondary	D IC
IDE	AN, MSTR	D IDE
IMAX **(1,4)**	MAX, indented with text labels	D IMAX
IND **(4)**	IPC, NCL, CC, ST, IT, RL	D TI IND
IPC	International Patent Classifications (IC (ICM, ICS), ICA, ICI)	D IPC
ISTD **(1)**	STD, indented with text labels	D ISTD
MAX **(1,4)**	ALL, plus PI for other family accession numbers	D MAX
OBIB **(1)**	BIB, Original (AN, TI, IN, PA, SO, PI, DS, AI, PRAI, DT, LA, OS)	D OBIB
OIBIB **(1)**	OBIB, indented with text labels	D OIBIB
PATS **(1)**	SO, PI	D PATS
SAM **(4)**	IPC, NCL, CC, SX, TI, ST, IT, and FQHIT	DIS SAM 1-5
SBIB **(1)**	BIB, without RE.CNT (AN, DN, TI, AU, IN, CS, PA, SO, PB, DT, LA, FAN.CNT, PI, PRAI, OS)	D 1 3 SBIB
SCAN **(3,4,6)**	IPC, NCL, CC, TI, ST, IT, RL, FQHIT (random display, no answer numbers)	D SCAN
SIBIB **(1)**	SBIB, indented with text labels	D SIBIB
STD **(1)**	AN, TI, IN, PA, SO, DT, LA, FAN.CNT, PI, PRAI, NCL, OS, RE.CNT	D STD

DISPLAY Formats (cont'd)

Format	Content	Examples
FHIT	The first full Markush structure that matches the query structure and (or) the fields containing hit text terms	D CBIB ABS FHIT
FQHIT **(7,8)**	Portions of the first Markush structure that match the query structure and (or) fields containing the first query focus hit text terms	D FQHIT
FQHITEXG **(7,9)**	FQHIT plus definitions for unmatched G-groups that are visible in the assembled display	D FQHITEXG
HIT	The full Markush structure(s) that match the query structure and (or) the fields containing hit text terms	D CBIB ABS HIT
QHIT **(7,8)**	The portions of each Markush structure that match the query structure and (or) the fields containing hit text terms	D QHIT
QHITEXG **(7,9)**	QHIT plus definitions for unmatched G-groups that are visible in the assembled display	D QHITEXG

(1) By default, patent, 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) Custom display only.
(3) No online display fee for this format.
(4) By default, roles are displayed as codes and text. To suppress the display of role codes and text, enter SET ROLES OFF. To display only codes, enter SET ROLES CODES.
(5) SX displays all information in the CC field, i.e., CA section and section cross-references.
(6) SCAN must be specified on the command line, i.e., D SCAN or DISPLAY SCAN.
(7) SET MPTASSEMBLY command allows you to control answer assembly formats and is set ON as a system default. To change the MARPAT display, enter SET MPTASSEMBLY BOTH or SET MPTASSEMBLY OFF. If MPTASSEMBLY is set to BOTH or ON and assembly is not possible, only the unassembled display will be shown. For more information on SET MPTASSEMBLY see HELP T13 in MARPAT.
(8) If you want to retain the original FQHIT/QHIT format, SET MPTASSEMBLY OFF.
(9) Even if MPTASSEMBLY is set to OFF, the unmatched G-group definitions available in the QHITEXG and FQHITEXG formats will only be shown with assembled displays. If MPTASSEMBLY is set to BOTH, an unassembled display will follow.

Displaying CAplus or MEDLINE documents for cited references

Enter the following in the DISPLAY command: L-number for the answer set; answer number (only one may be specified); RAN.CAPLUS(x-y), RAN.MED(x-y) where (x-y) is the cited reference number, numbers, or range of numbers; and the display format for the document to display, e.g., BIB ABS. For example, to display CAplus records for the cited references 1 and 2 from answer 2 in the answer set L5, enter the following:

```
=> D RAN.CAPLUS(1-2) L5 2 BIB ABS
```

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	SORT
Abstract Text	AB	Y	N
Accession Number	AN	Y **(1)**	N
Author (Inventor)	AU	Y	Y
CA Classification Code (section and subsection)	CC	Y	Y
CA Section Cross-Reference Code	SX	Y	Y
CAS Registry Number	RN	Y **(2)**	N
CAS Role	RL	Y	N
Cited References	RE	Y	N
Cited Reference(n)	RE(n)	Y **(3)**	N

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

Field Name	Field Code	ANALYZE/ SELECT	SORT
Cited Reference Accession Number in CAplus	RAN.CAPLUS	Y **(4)**	N
Cited Reference Accession Number(n) in CAplus	RAN.CAPLUS(n)	Y **(3,4)**	N
Cited Reference Accession Number in MEDLINE	RAN.MED	Y **(5)**	N
Cited Reference Accession Number(n) in MEDLINE	RAN.MED(n)	Y **(3,5)**	N
Cited Reference Author Name	RAU	Y	N
	RIN	Y **(6)**	N
Cited Reference Count	RE.CNT	Y	Y
	REC	Y	Y
Cited Reference Patent Number	RPN	Y	N
Cited Reference Publication Year	RPY	Y	N
Cited Reference Work Title	RWK	Y	N
CODEN	CODEN	Y **(7)**	Y
Controlled Term	CT	Y	N
Corporate Source (Patent Assignee)	CS	Y	Y
Country Name of Author	CYA	Y	Y
Designated State	DS	Y	N
Designated States, Basic	DS.B	Y **(8)**	N
Document Type	DT	Y	Y
Family Accession Number	FAN	Y **(9)**	N
File Segment	FS	Y	Y
Index Term	IT	Y	N
International Standard (Document) Number	ISN	Y **(10)**	N
International Standard Serial Number	ISSN	Y	Y
Inventor Name	IN	Y	Y
IPC	IPC	Y **(11)**	Y
IPC, Additional or Supplementary	ICA	Y	Y
IPC, Index or Complementary	ICI	Y	Y
IPC, Main	ICM	Y	Y
IPC, Main and Secondary	IC	Y	Y
IPC, Secondary	ICS	Y	Y
Journal Type	JT	Y	Y
Language	LA	Y	Y
National Patent Classification	NCL	Y	Y
Other Source	OS	Y	Y
Patent Application Country	AC	Y	Y
Patent Application Country, Basic	AC.B	Y **(12)**	Y
Patent Application Date	AD	Y	Y
Patent Application Date, Basic	AD.B	Y **(13)**	Y
Patent Application Information	AI	Y **(14,15)**	Y
Patent Application Information, Basic	AI.B	Y **(15,16)**	Y
Patent Application Number	AP	Y **(15)**	Y
Patent Application Number, Basic	AP.B	Y **(15,17)**	Y
Patent Application and Priority Number	APPS	Y **(15,18)**	N
Patent Application and Priority Number, Basic	APPS.B	Y **(15,19)**	N
Patent Application Year	AY	Y	Y
Patent Application Year, Basic	AY.B	Y **(20)**	Y
Patent Assignee	PA	Y	Y
Patent Countries	PCS	Y **(21)**	N
Patent Countries, Basic	PCS.B	Y **(22)**	N
Patent Country	PC	Y	Y
Patent Country, Basic	PC.B	Y **(23)**	Y
Patent Country Count	CYC	Y **(24)**	N
Patent Information	PI	Y **(15,25)**	Y
Patent Information, Basic	PI.B	Y **(15,26)**	Y
Patent Kind Code	PK	Y	Y
Patent Kind Code, Basic	PK.B	Y **(27)**	Y
Patent Number	PN	Y **(15)**	Y
	PATS	Y **(15,28)**	N

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

Field Name	Field Code	ANALYZE/ SELECT	SORT
Patent Number, Basic	PN.B	Y **(15,29)**	Y
	PATS.B	Y **(15,30)**	N
Patent Number Count	PNC	Y **(31)**	N
Patent Number/Kind Code	PNK	Y	Y
Patent Number/Kind Code, Basic	PNK.B	Y	Y
Priority Application Country	PRC	Y	Y
Priority Application Country, Basic	PRC.B	Y **(32)**	Y
Priority Application Date	PRD	Y	Y
Priority Application Date, Basic	PRD.B	Y **(33)**	Y
Priority Application Information	PRAI	Y **(15,34)**	Y
Priority Application Information, Basic	PRAI.B	Y **(15,35)**	Y
Priority Application Number	PRN	Y **(15)**	Y
Priority Application Number, Basic	PRN.B	Y **(15,36)**	Y
Priority Application Year	PRY	Y	Y
Priority Application Year, Basic	PRY.B	Y **(37)**	Y
Publication Date	PD	Y	Y
Publication Date, Basic	PD.B	Y **(38)**	Y
Publication Year	PY	Y	Y
Publication Year, Basic	PY.B	Y **(39)**	Y
Source of Document	SO	Y	N
Supplementary Term	ST	Y	N
Title	TI	Y (default)	Y
Treatment Code	TC	Y **(40)**	Y

(1) SELECT HIT AN may be used to restrict terms extracted to those that match the search expression used to create the answer set.
(2) Appends /BI to the terms created by SELECT.
(3) (n) may be a single number, range, or a list of numbers separated by a space or comma.
(4) Selects or analyzes cited reference accession number in CAplus and appends /AN to the terms created by SELECT.
(5) Selects or analyzes cited reference accession number in MEDLINE and appends /AN to the terms created by SELECT.
(6) Selects or analyzes cited reference author name and appends /RAU to the terms created by SELECT.
(7) Selects CODEN and appends /ISN to the terms created by SELECT.
(8) Appends /DS to the terms created by SELECT.
(9) Appends /AN to the terms created by SELECT.
(10) Selects or analyzes the CODEN and appends /ISN to the terms created by SELECT.
(11) Selects or analyzes IC, ICA, and ICI and appends /IPC to the terms created by SELECT.
(12) Appends /AC to the terms created by SELECT.
(13) Appends /AD to the terms created by SELECT.
(14) Selects or analyzes Patent Application Number and appends /AP to the terms created by SELECT.
(15) Enter SET PATENT DERWENT at an arrow prompt (=>) to SELECT patent, application, and priority numbers in Derwent format.
(16) Selects or analyzes Basic Patent Application Number and appends /AP to the terms created by SELECT.
(17) Appends /AP to the terms created by SELECT.
(18) Selects or analyzes AP and PRN and appends /APPS to the terms created by SELECT.
(19) Selects or analyzes AP.B and PRN>B and appends /APPS to the terms created by SELECT.
(20) Appends /AY to the terms created by SELECT.
(21) Selects or analyzes country codes from PI and DS and appends /PCS to the terms created by SELECT.
(22) Selects or analyzes country codes from PI.B and DS.B and appends /PCS to the terms created by SELECT.
(23) Appends /PC to the terms created by SELECT.
(24) Appends /CY.CNT to the terms created by SELECT.
(25) Selects or analyzes the Patent Number and appends /PN to the terms created by SELECT.
(26) Selects or analyzes the Basic Patent Number and appends /PN to the terms created by SELECT.
(27) Appends /PK to the terms created by SELECT.
(28) Selects or analyzes the Patent Number and appends /PATS to the terms created by SELECT.
(29) Appends /PN to the terms created by SELECT.
(30) Selects or analyzes the Basic Patent Number and appends /PATS to the terms created by SELECT.
(31) Appends /PN.CNT to the terms created by SELECT.
(32) Appends /PRC to the terms created by SELECT.
(33) Appends /PRD to the terms created by SELECT.
(34) Selects Priority Number and appends /PRN to the terms created by SELECT.
(35) Selects Basic Priority Number and appends /PRN to the terms created by SELECT.
(36) Appends /PRN to the terms created by SELECT.
(37) Appends /PRY to the terms created by SELECT.
(38) Appends /PD to the terms created by SELECT.

(39) Appends /PY to the terms created by SELECT.
(40) Appends /DT to the terms created by SELECT.

Sample Record

DISPLAY IALL

ACCESSION NUMBER: 112:36458 LMARPAT Full-text
TITLE: Preparation of chiral statine analogs via aldol condensation of acetoxytriarylethanols with amino acid aldehyde derivatives
INVENTOR(S): Devant, Ralf U.; Radunz, Hans Eckart
PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Fed. Rep. Ger.
SOURCE: Ger. Offen., 6 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
INT. PATENT CLASSIF.:
INITIAL CLASS: C07C0101-30 [ICM,4]; C07C0125-065 [ICS,4]; C07D0263-24 [ICS,4]
RECLASSIFICATION: C07C0227-32 [I,A]; C07C0229-22 [I,A]; C07C0229-34 [I,A]; C07C0271-22 [I,A]; C07D0263-24 [I,A]; C07D0333-16 [I,A]
CLASSIFICATION: 34-2 (Amino Acids, Peptides, and Proteins)
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

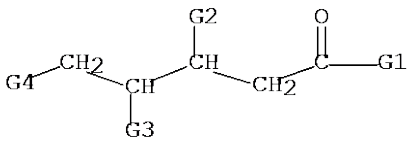
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3743225	A1	19890629	DE 1987-3743225	19871219

PRIORITY APPLN. INFO.: DE 1987-3743225 19871219
OTHER SOURCE(S): MARPAT 112:36458
ABSTRACT:
Statine derivs. R4CH2CH(NHR3)CH(OR2)CH2CO2R1 [I; R1 = H, C1-5 alkyl; R2 = H, C1-5 alkyl, COR5; R3 = H, protecting group; R4 = C1-5 alkyl, (substituted) Ph, cyclohexyl; R5 = C1-5 alkyl], useful as renin inhibitor intermediates, were prepared enantioselectively by condensation of AcOCHR6CR7R8OH (R6-R8 = C6-10 aryl) with R4CH2C(NHR3)CHO followed by hydrolysis and transesterification. Thus, (S)-2-acetoxy-1,1,2-triphenylethanol in THF at -78° was treated with (Me2CH)2NLi, and the mixture was stirred 1 h at 0°, and recooled to -78°. N-tert-Butoxycarbonyl-(S)-phenylalaninal in THF was added and the mixture was stirred 2 h to give (2S,3S,4S)-(3-hydroxy-4-tert-butyloxycarbonylamino-5-phenylpentanoyloxy)-1,1,2-triphenylethanol (in a 12:1 ratio over the 3R isomer). The latter was stirred with NaOMe in dioxane/MeOH at 0° to give Me (3S,4S)-3-hydroxy-4-tert-butoxycarbonylamino-5-phenylpentanoate.

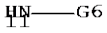
SUPPL. TERM: renin inhibitor intermediate statine analog; amino acid statine analog prepn; aldol condensation enantioselective amino acid aldehyde
INDEX TERM: Aldol condensation
(of acetoxytriarylethanol derivs. with amino acid aldehyde derivs.)
INDEX TERM: Asymmetric synthesis and induction
(of statine derivs., via aldol condensation of acetoxytriarylethanols with amino acid aldehydes)
INDEX TERM: 72155-45-4, N-tert-Butoxycarbonyl-(S)-phenylalaninal
124529-58-4, 2-tert-Butoxycarbonylamino-3-(4-methylcyclohexyl)propanal
ROLE: RCT (Reactant); RACT (Reactant or reagent)
(aldol condensation of, with acetoxytriphenylethanol)
INDEX TERM: 59830-60-3
ROLE: RCT (Reactant); RACT (Reactant or reagent)
(aldol condensation of, with acetoxytriphenylethanol, in preparation of renin inhibitor intermediate)
INDEX TERM: 95061-51-1, (S)-2-Acetoxy-1,1,2-triphenylethanol

```
                    ROLE: RCT (Reactant); RACT (Reactant or reagent)
                       (aldol condensation of, with phenylalaninal)
INDEX TERM:         124529-60-8P   124529-62-0P
                    ROLE: RCT (Reactant); SPN (Synthetic preparation); PREP
                    (Preparation); RACT (Reactant or reagent)
                       (preparation and aldol condensation of, with phenylalaninal
                       derivative, in preparation of intermediate for rennin
                       inhibitor)
INDEX TERM:         118219-44-6P   124529-59-5P   124529-63-1P
                    ROLE: RCT (Reactant); SPN (Synthetic preparation); PREP
                    (Preparation); RACT (Reactant or reagent)
                       (preparation and methanolysis of)
INDEX TERM:         124529-61-9P
                    ROLE: RCT (Reactant); SPN (Synthetic preparation); PREP
                    (Preparation); RACT (Reactant or reagent)
                       (preparation and methanolysis of, in preparation of rennin
                        inhibitor intermediate)
INDEX TERM:         123689-40-7P
                    ROLE: RCT (Reactant); SPN (Synthetic preparation); PREP
                    (Preparation); RACT (Reactant or reagent)
                       (preparation of, as intermediate for renin inhibitor)
INDEX TERM:         72155-54-5P   101669-80-1P
                    ROLE: RCT (Reactant); SPN (Synthetic preparation); PREP
                    (Preparation); RACT (Reactant or reagent)
                       (preparation of, as renin inhibitor intermediate)
INDEX TERM:         118219-42-4P
                    ROLE: SPN (Synthetic preparation); PREP (Preparation)
                       (preparation of, as renin inhibitor intermediate)
INDEX TERM:         49642-07-1DP, Statine, derivs.
                    ROLE: SPN (Synthetic preparation); PREP (Preparation)
                       (preparation of, via aldol condensation of amino acid
                       aldehydes with acetoxytriarylethanols)
INDEX TERM:         2786-07-4, 2-Thienyllithium
                    ROLE: RCT (Reactant); RACT (Reactant or reagent)
                       (reaction of, with mandelic acid and acetyl chloride)
INDEX TERM:         4294-57-9, p-Tolylmagnesium bromide
                    ROLE: RCT (Reactant); RACT (Reactant or reagent)
                       (reaction of, with methylmandelic acid and acetyl
                       chloride)
INDEX TERM:         75-36-5, Acetyl chloride
                    ROLE: RCT (Reactant); RACT (Reactant or reagent)
                       (reaction of, with methylmandelic acid and tolylmagnesium
                       bromide, in preparation of renin inhibitor intermediate)
INDEX TERM:         17199-29-0, S-Mandelic acid
                    ROLE: RCT (Reactant); RACT (Reactant or reagent)
                       (reaction of, with thienyllithium and acetyl chloride)
INDEX TERM:         75172-62-2
                    ROLE: RCT (Reactant); RACT (Reactant or reagent)
                       (reaction of, with tolylmagnesium bromide and acetyl
                       chloride, in preparation of renin inhibitor intermediate)
REFERENCE COUNT:    1     THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS
                          RECORD.
REFERENCE(S):       (1) Anon; DE 3628650 A1 CAPLUS
```

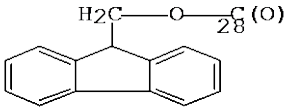
MSTR 1




```
G1     = OH / alkoxy <containing 1-5 C>
G2     = OH / alkoxy <containing 1-5 C> /
         alkylcarbonyloxy <containing 1-5 C>
G3     = NH2 / 11
```

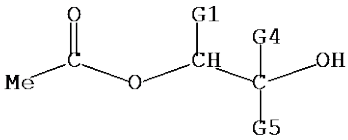


G4 = alkyl <containing 1-5 C> /
Ph (opt. substd. by 1 or more G5) /
cyclohexyl (opt. substd. by 1 or more G5)
G5 = alkyl <containing 1-4 C> /
alkoxy <containing 1-4 C> / halo / OH
G6 = R <"protecting group"> / (Examples: CO2CH2Ph /
CO2Bu-t / CH2Ph / 28)

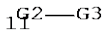


Patent location: claim 1

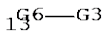
MSTR 2



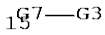
G1 = aryl <containing 6-10 C> (opt. substd.) /
heteroaryl <containing 6-10 C> (opt. substd.) /
(Examples: 11 / thienyl / pyridyl / naphthyl)



G2 = phenylene
G3 = halo / Cl / F / OH / Me / OMe / NO2
G4 = aryl <containing 6-10 C> (opt. substd.) /
heteroaryl <containing 6-10 C> (opt. substd.) /
(Examples: 13 / thienyl / pyridyl / naphthyl)

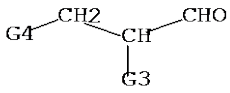


G5 = aryl <containing 6-10 C> (opt. substd.) /
heteroaryl <containing 6-10 C> (opt. substd.) /
(Examples: 15 / thienyl / pyridyl / naphthyl)

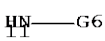


G6 = phenylene
G7 = phenylene
Patent location: claim 1

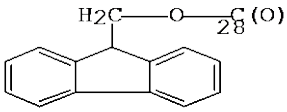
MSTR 3



G3 = NH2 / 11

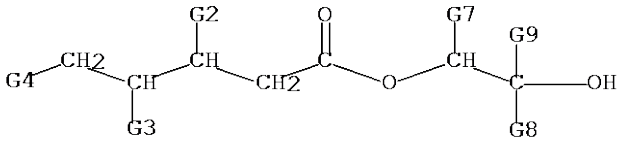


G4 = alkyl <containing 1-5 C> /
Ph (opt. substd. by 1 or more G5) /
cyclohexyl (opt. substd. by 1 or more G5)
G5 = alkyl <containing 1-4 C> /
alkoxy <containing 1-4 C> / halo / OH
G6 = R <"protecting group"> / (Examples: CO2CH2Ph /
CO2Bu-t / CH2Ph / 28)

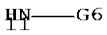


Patent location: claim 1

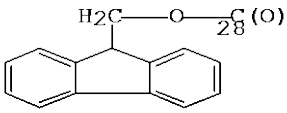
MSTR 4



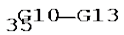
G2 = OH / alkoxy <containing 1-5 C> /
alkylcarbonyloxy <containing 1-5 C>
G3 = NH2 / 11



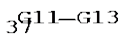
G4 = alkyl <containing 1-5 C> /
Ph (opt. substd. by 1 or more G5) /
cyclohexyl (opt. substd. by 1 or more G5)
G5 = alkyl <containing 1-4 C> /
alkoxy <containing 1-4 C> / halo / OH
G6 = R <"protecting group"> / (Examples: CO2CH2Ph /
CO2Bu-t / CH2Ph / 28)



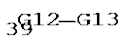
G7 = aryl <containing 6-10 C> (opt. substd.) /
heteroaryl <containing 6-10 C> (opt. substd.) /
(Examples: 35 / thienyl / pyridyl / naphthyl)



G8 = aryl <containing 6-10 C> (opt. substd.) /
heteroaryl <containing 6-10 C> (opt. substd.) /
(Examples: 37 / thienyl / pyridyl / naphthyl)



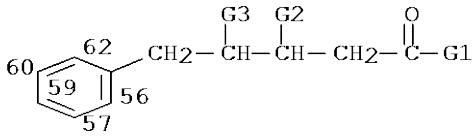
G9 = aryl <containing 6-10 C> (opt. substd.) /
heteroaryl <containing 6-10 C> (opt. substd.) /
(Examples: 39 / thienyl / pyridyl / naphthyl)



G10 = phenylene
G11 = phenylene
G12 = phenylene
G13 = halo / Cl / F / OH / Me / OMe / NO2
Patent location: claim 1

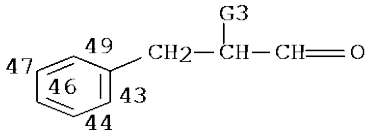
DISPLAY QHIT (SET MPTASSEMBLY ON = SYSTEM DEFAULT)

MSTR 1 Assembled



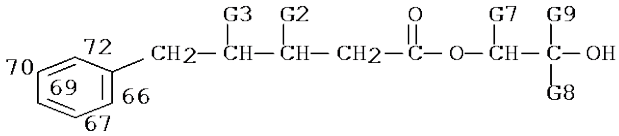
56, 57, 59, 60, 62: opt. substd. by 1 or more G5
Patent location: claim 1

MSTR 3 Assembled



43, 44, 46, 47, 49: opt. substd. by 1 or more G5
Patent location: claim 1

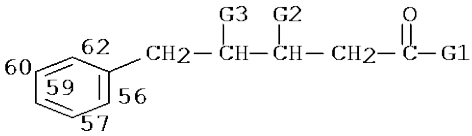
MSTR 4 Assembled



66, 67, 69, 70, 72: opt. substd. by 1 or more G5
Patent location: claim 1

DISPLAY QHITEXG

MSTR 1 Assembled

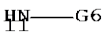


56, 57, 59, 60, 62: opt. substd. by 1 or more G5

Additional displayed G-groups:
G1 = OH / alkoxy <containing 1-5 C>

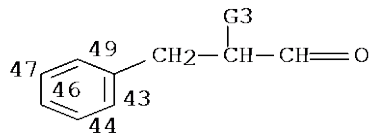
G2 = OH / alkoxy <containing 1-5 C> /
alkylcarbonyloxy <containing 1-5 C>

G3 = NH2 / 11



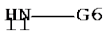
Patent location: claim 1

MSTR 3 Assembled



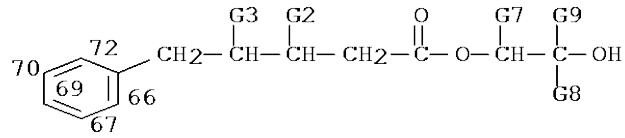
43, 44, 46, 47, 49: opt. substd. by 1 or more G5

Additional displayed G-groups:
G3 = NH2 / 11



Patent location: claim 1

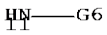
MSTR 4 Assembled



66, 67, 69, 70, 72: opt. substd. by 1 or more G5

Additional displayed G-groups:
G2 = OH / alkoxy <containing 1-5 C> /
alkylcarbonyloxy <containing 1-5 C>

G3 = NH2 / 11



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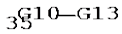
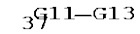
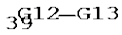
heteroaryl <containing 6-10 C> (opt. substd.) /
(Examples: 35 / thienyl / pyridyl / naphthyl)



G8 = aryl <containing 6-10 C> (opt. substd.) /
heteroaryl <containing 6-10 C> (opt. substd.) /
(Examples: 37 / thienyl / pyridyl / naphthyl)



G9 = aryl <containing 6-10 C> (opt. substd.) /
heteroaryl <containing 6-10 C> (opt. substd.) /
(Examples: 39 / thienyl / pyridyl / naphthyl)



Patent location: claim 1

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