

## **Brief Guide for the use of CAS Indexes**

Use Index

The following table is a guide to CAS indexes to the kinds of information that can be retrieved from each. The general interest areas in Column I are by no means exhaustive, but only suggest those more frequently encountered as an approach to the CAS data base. The second column entitled CONSULT identifies the product that should be the first to be consulted for each general interest area. Subsequent columns identify the kinds of information derived from each product and, if necessary, direct the searcher to what further steps should be taken.

TABLE I - USE INDEX

GENERAL INTEREST AREA	CONSULT	INFORMATION RETRIEVED	THEN USE	INFORMATION RETRIEVED
Alloy composition	CHEMICAL SUBSTANCE INDEX	CA Abstract Numbers CAS Registry Number		
Alloy name	INDEX GUIDE	CA Index Term CAS Registry Number	CHEMICAL SUBSTANCE INDEX	CA Abstract Numbers CAS Registry Number
Analytical procedure	INDEX GUIDE	CA Index Term	GENERAL SUBJECT INDEX	CA Abstract Numbers
Animal name	INDEX GUIDE	CA Index Term	GENERAL SUBJECT INDEX	CA Abstract Numbers
Author name	AUTHOR INDEX	CA Abstract Numbers Co-Author Names Titles	+	
Biological process	INDEX GUIDE	CA Index Term	GENERAL SUBJECT INDEX	CA Abstract Numbers
Biological property	INDEX GUIDE	CA Index Term	GENERAL SUBJECT INDEX	CA Abstract Numbers
CAS Registry Number	REGISTRY HANDBOOK	CA Index Name Molecular Formula	CHEMICAL SUBSTANCE INDEX FORMULA INDEX	CA Abstract Numbers CAS Registry Number
Chemical name, systematic	INDEX GUIDE	CA Index Name CAS Registry Number or No Listing	CHEMICAL SUBSTANCE INDEX (No Listing in INDEX GUIDE suggests that the systematic name is a CA Index Name)	CA Abstract Numbers CAS Registry Number
Chemical name, trivial	INDEX GUIDE	CA Index Name CAS Registry Number	CHEMICAL SUBSTANCE INDEX	CA Abstract Numbers CAS Registry Number
Chemical process	INDEX GUIDE	CA Index Term	CHEMICAL SUBSTANCE INDEX GENERAL SUBJECT INDEX	CA Abstract Numbers CAS Registry Number
Chemical property	INDEX GUIDE	CA Index Term	GENERAL SUBJECT INDEX	CA Abstract Numbers
Chemical structure diagram	FORMULA INDEX	CA Abstract Numbers CA Index Name CAS Registry Number		
Color Index Number	INDEX GUIDE	CA Index Name	CHEMICAL SUBSTANCE INDEX	CA Abstract Numbers CAS Registry Number

Table I (Continued)

GENERAL INTEREST AREA	CONSULT	INFORMATION RETRIEVED	TIEN USE	INFORMATION RETRIEVED
Company name	AUTHOR INDEX	CA Abstract Numbers Titles		
Disease name	INDEX GUIDE	CA Index Term	GENERAL SUBJECT INDEX	CA Abstract Numbers
Drug name	INDEX GUIDE	CA Index Name CAS Registry Number	CHEMICAL SUBSTANCE INDEX	CA Abstract Numbers CAS Registry Number
Enzyme Commission Number	INDEX GUIDE	CA Index Name CAS Registry Number	CHEMICAL SUBSTANCE INDEX	CA Abstract Numbers CAS Registry Number
Enzyme name	INDEX GUIDE	CA Index Name CAS Registry Number	CHEMICAL SUBSTANCE INDEX	CA Abstract Numbers CAS Registry Number
Genus-species name	INDEX GUIDE	CA Index Term	GENERAL SUBJECT INDEX	CA Abstract Numbers
Industrial process	INDEX GUIDE	CA Index Term	CHEMICAL SUBSTANCE INDEX GENERAL SUBJECT INDEX	CA Abstract Numbers CAS Registry Number
Laboratory procedure	INDEX GUIDE	CA Index Term	GENERAL SUBJECT INDEX	CA Abstract Numbers
Laboratory process	INDEX GUIDE	CA Index Term	GENERAL SUBJECT INDEX	CA Abstract Numbers
Microorganism name	INDEX GUIDE	CA Index Term	GENERAL SUBJECT INDEX	CA Abstract Numbers
Mineral name	INDEX GUIDE	CA Index Name CAS Registry Number	CHEMICAL SUBSTANCE INDEX	CA Abstract Numbers CAS Registry Number
Molecular formula	FORMULA INDEX	CA Abstract Numbers CA Index Name CAS Registry Number		
Molecular structure	FORMULA INDEX	CA Abstract Numbers CA Index Name CAS Registry Number		
Organ name	INDEX GUIDE	CA Index Term	GENERAL SUBJECT INDEX	CA Abstract Numbers
Patent application number	NUMERICAL PATENT INDEX	CA Abstract Numbers		
Patent assignee	AUTHOR INDEX	CA Abstract Numbers Co-Assignee Names Patent Titles		
Patent grantee	AUTHOR INDEX	CA Abstract Numbers Co-Grantee Names Patent Titles		
Patent number	NUMERICAL PATENT INDEX	CA Abstract Numbers		

Table I (Continued)

GENERAL INTEREST AREA	CONSULT	INFORMATION RETRIEVED	TIEN USE	INFORMATION RETRIEVED
Patent number	PATENT CONCORDANCE	CA Reference to first patent issues; Patent Numbers for same invention in other countries		
Pharmacological property	INDEX GUIDE	CA Index Term	GENERAL SUBJECT INDEX	CA Abstract Numbers
Physical property	INDEX GUIDE	CA Index Term	GENERAL SUBJECT INDEX	CA Abstract Numbers
Plant name	INDEX GUIDE	CA Index Term	GENERAL SUBJECT INDEX	CA Abstract Numbers
Ring structure	INDEX OF RING SYSTEMS	CA Index Name	CHEMICAL SUBSTANCE INDEX	CA Abstract Numbers CAS Registry Number
Tissue name	INDEX GUIDE	CA Index Term	GENERAL SUBJECT INDEX	CA Abstract Numbers
Trade name	INDEX GUIDE	CA Index Name CAS Registry Number	CHEMICAL SUBSTANCE INDEX	CA Abstract Numbers CAS Registry Number

# How to Search Printed CA

IT'S A COPY

Which leads you to:

Are you searching for:	Look in:	You will find:	A journal abstract
An author? Flanagan, Denise	Author Index	Flanagan, Denise M. See Dunn, Robert W.; Martin, Lawrence L.  Dunn, Robert W. See Davis, Larry; Hrib, Nicholas J. —; Flanagan, D.M.; Martin, L.L.; Kerman, L.L.; Woods, A.T.; Camacho, F.; Wilmot, C.A.; Cornfeldt, M.L.; Effland, R.C.; et al.  Stereoselective R-(+) enantiomer of HA-966 displays anxiolytic effects in rodents, 82902s	7 8 1 2 9 3 4 5 6 117-82902s Stereoselective R-(+) enantiomer of HA-966 displays anxiolytic effects in rodents. Dunn, Robert W.; Flanagan, Denise M.; Martin, Lawrence L.; Kerman, Lisa L.; Woods, Anne T.; Camacho, Fernando; Wilmot, Carole A.; Cornfeldt, Michael L.; Effland, Richard C.; et al. (Dep. Biol. Res., Hoechst-Roussel Pharm., Inc., Somerville, NJ 08876 USA). <i>Eur. J. Pharmacol.</i> 1992 214(2-3), 207-14 (Eng.) Anxiolytic agents disinhibit suppressed behaviors in rodents in preclin. models of anxiety such as the non-conditioned social interaction and elevated plus maze assays and the conditioned conflict Cook and Davidson procedure. The (+) and (-) enantiomers of (±)-3-amino-1-hydroxy-2-pyrrolidinone (HA-966) have been resolved and revealed that R- (+)-HA-966 significantly disinhibits both non-conditioned and conditioned suppressed behavior similar to the benzodiazepine diazepam, while the S(-) enantiomer was devoid of anxiolytic activity and only produced behavioral sedation. Furthermore, R-(+)-HA-966 lacked side-effects in rodents commonly assoc. with the administration of benzodiazepines such as motor incoordination and ataxia, significant interactions with ethanol, and amnesia. These data suggest that R-(+)-HA-966, an antagonist at the strychnine-insensitive glycine/NMDA receptor site, was anxiolytic and lacked some of the side-effects assoc. with benzodiazepine anxiolytics.
A subject term? Anxiety Tranquilizers	Index Guide  then  General Subject Index	<b>Anxiety</b> See also <i>Emotion</i> anxiolytics—see <i>Anxiolytics</i>  <b>Tranquilizers and Neuroleptics</b> See also <i>Hypnotics and Sedatives</i> <i>Psychotropics</i> anxiolytics—see <i>Anxiolytics</i>  <b>Anxiolytics</b>  aminohydroxypyrrolidinone HA-966 enantiomer as, in conditioned and non-conditioned suppressed behavior model, side-effects in relation to, 82902s	
Substance Name? HA-966	Index Guide  then  Chemical Substance Index	<b>HA 966</b> See <i>2-Pyrrolidinone, 3-amino-1-hydroxy-</i> [1003-51-6]  <b>2-Pyrrolidinone (<math>\gamma</math>-butyrolactam)</b> [616-45-5] —, 3-amino-1-hydroxy- [1003-51-6] (R)- [123931-04-4] anxiolytic activity of, in conditioned and nonconditioned suppressed behavior model, side effects in relation to, 82902s  (S)- [111821-58-0] anxiolytic activity of, in conditioned and nonconditioned suppressed behavior model, side effects in relation to, 82902s	

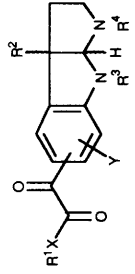
1. abstract number
2. article title
3. author's name
4. location of work
5. journal title
6. date of publication
7. volume and issue number
8. inclusive pagination
9. language of publication

Which leads you to:

A patent abstract

- 3 1 2 5 4 6 9 7 8

116:59352h Preparation of oxopyrrolo[2,3-b]indoleacetates as cholinergic agents for treatment of memory dysfunction. Flanagan, Denise M. (Hoechst-Roussel Pharmaceuticals, Inc) Eur. Pat. Appl. EP 457,318 (Cl. C07D487/04), 21 Nov 1991, US Appl. 524,627, 17 May 1990; 23 pp. Title comps. [I; X = NH, O,



alkylimino, arylalkylimino; R<sup>1</sup> = H, (cyclo)alkyl, aryl, arylalkyl, haloalkyl, thienyl, furyl, pyrrolyl, pyridinyl, piperidinyl, piperazinyl, pyrrolidinyl, etc.; R<sup>2</sup> = H, alkyl; R<sup>3</sup> = alkyl, arylalkyl; R<sup>4</sup> = H, alkyl, alkenyl, alkynyl, arylalkyl, CHO, alkylcarbonyl, alkoxycarbonyl, arylalkylcarbonyl; Y = H, halo, alkoxy] were prepd. Thus, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo[2,3-b]indole was treated with pyridinium hydrobromide perbromide to give the 5-bromo deriv. This in Et<sub>2</sub>O was treated with tetramethylethylenediamine, *sec*-BuLi, and EtO<sub>2</sub>CCO<sub>2</sub>Et to give the 5-acylated product, which was treated with PhCH<sub>2</sub>CH<sub>2</sub>OH and Ti(OEt)<sub>4</sub> to give phenylethyl 1,2,3,3a,8,8a-hexahydro- $\alpha$ -oxo-1,3a,8-trimethyl-5-pyrrolo[2,3-b]-indoleacetate. The latter at 0.3 mg/kg s.c. in mice gave 36% reversal of scopolamine-induced memory deficit, vs. 13% reversal for both tacrine at 0.63 mg/kg and pilocarpine at 5.0 mg/kg.

1. abstract number
2. patent title
3. names of inventors
4. names of assignees
5. patent number
6. patent classification
7. date of publication
8. patent application number and date
9. number of pages

You will find:

**Flanagan, Denise M.**  
Preparation of oxopyrrolo[2,3-b]indoleacetates as cholinergic agents for treatment of memory dysfunction, P 59352h

**CA (Canada)**  
2042737 AA, See EP 457318 A1

**EP (European Patent Organization)**  
457318 A1 (Designated States: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE), 116:59352h  
AU 634380 B2  
CA 2042737 AA  
HU 61310 A2  
JP 04/226989 A2  
US 5173497 A  
(Continuation-in-part)  
ZA 91/03711 A

**JP (Japan)**  
04/226989 A2, See EP 457318 A1

**C<sub>21</sub>H<sub>26</sub>N<sub>2</sub>O<sub>3</sub>**  
Pyrrolo[2,3-b]indole-5-acetic acid,  
1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl- $\alpha$ -oxo-  
2-phenylethyl ester [138681-85-3], P 59352h

**3-RING SYSTEMS**  
5,5,6

**C<sub>4</sub>N<sub>1</sub>C<sub>4</sub>N<sub>1</sub>C<sub>6</sub>**  
Pyrrolo[2,3-b]indole

**Pyrrolo[2,3-b]indole-5-acetic acid,**  
—, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl- $\alpha$ -oxo- [138681-89-7]

**2-phenylethyl ester [138681-85-3]**, prepn. of, as cholinergic agent for treatment of memory dysfunction, P 59352h

Look in:

Author Index

Patent Index

Formula Index

Index of Ring Systems

then

Chemical Substance Index

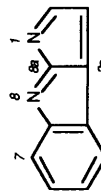
Are you searching for:

An inventor?  
Flanagan, Denise

A patent number?  
Canadian Patent 2042737  
European Patent 457318  
Japanese Patent 04/226989

Molecular Formula?  
C<sub>23</sub>H<sub>26</sub>N<sub>2</sub>O<sub>3</sub>

Ring Parent?



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CAS6506-0894

## WEEKLY ISSUE INDEXES

Each weekly issue of *CA* contains several indexes. These include only the author index, patent index, and a keyword-subject index. The subject index is free-term (terminology employed is not standardized but drawn from titles and abstracts) and provides the only subject or chemical substance access until the volume indexes appear.

## VOLUME AND COLLECTIVE INDEXES AS CURRENTLY PUBLISHED

### AUTHOR INDEX:

Lists personal and corporate authors, patentees, and assignees in alphabetical order with titles of articles of patent specifications and *CA* abstract numbers.

### PATENT INDEX:

Relates new patent numbers, grouped by country in ascending numerical order, with their corresponding *CA* abstract numbers. If the same patent has been taken in more than one country, a cross-reference is provided.

### FORMULA INDEX:

Relates the molecular formulas for chemical substances with the *CA* chemical substance index names, *CAS* registry numbers, and corresponding *CA* abstract numbers. Formulas are arranged according to the Hill system: first C's, then H's, followed by other elements in alphabetical order. References to abstracts do not include descriptions of the documents' content. However, this index is most useful in identifying the *CA* chemical substance name, which should then be used to access the **Chemical Substance Index**.

### GENERAL SUBJECT INDEX:

Relates index entries which do not refer to specific chemical substances to the corresponding *CA* abstracts. These entries include concepts, general classes of chemical substances, applications, uses, properties, reactions, and processes. Guidance to vocabulary and usage is provided by the *Index Guide*. Prior to 1971 this index included chemical substance names as well.

### CHEMICAL SUBSTANCE INDEX:

Relates the *CA* index name of chemical substances (and their *CAS* registry numbers) to *CA* abstract numbers for documents in which the substances are mentioned. For each reference a brief description of the document's content is included. Proper *CA* names and an explanation of the nomenclature system can be found in the *Index Guide*. Prior to 1971 chemical substance names are found in the **General Subject Index**.

### INDEX OF RING SYSTEMS:

Ring composition, ring size, and number of rings are listed, allowing one to determine the systematic *CA* name.

**CA Collective Indexes: Historical Development**

	Collective Index										
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th
Years	1907-1916	1917-1926	1927-1936	1937-1946	1947-1956	1957-1961	1962-1966	1967-1971	1972-1976	1977-1981	1982-1986
<i>CA</i> volumes	1-10	11-20	21-30	31-40	41-50	51-55	56-65	66-75	76-85	86-95	96-105
Author Index	x	x	x	x	x	x	x	x	x	x	x
Subject Index	x	x	x	x	x	x	x	x	x	x	x
<i>Index Guide</i>								x	x	x	x
Chemical Substance Index									x	x	x
General Subject Index					x	x	x	x	x	x	x
Formula Index					a	a	x	x	x	x	x
Index of Ring Systems	a	a	a	a	a	a	x	x	x	x	x
Numerical Patent Index				b	x	x	x	x	x		
Patent Concordance										x	x
Patent Index											

\* For the 1st through the 6th Collective Indexes, Ring System Information was included in the Introduction to the *Subject Index*; for the 7th through the 11th Collective Indexes, the *Index of Ring Systems* was bound with the *Formula Index*.

\* Two special Collective Indexes are available for searches of patents and formulas: The *10-Year Numerical Patent Index to Chemical Abstracts (1937-1946)* and the *27-Year Collective Formula Index to Chemical Abstracts (1920-1946)*.