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(54) Title: SYSTEMS AND METHODS TO FACILITATE MULTIPLE ORDER COMBINATORIAL CHEMICAL PROCESSES

(57) Abstract: A method to screen for reactive chemicals comprises the steps of configuring a set of constructs such that each construct of the set includes a pairwise combination of a chemical entity (A_1-A_i) of a chemical library (A) and a chemical entity (B_1-B_j) of a chemical library (B). The set of constructs includes essentially every possible pairwise combination of the chemical entities (A_1-A_i) of the chemical library (A) and the chemical entities (B_1-B_j) of the chemical library (B). The constructs are exposed to a given set of conditions to facilitate reactions or interactions between the chemical entity (A_1-A_i) and the chemical entity (B_1-B_j) of each construct. The constructs are screened to identify any reactions or interactions, and the chemical entity (A_1-A_i) and the chemical entity (B_1-B_j) of any constructs where reactions or interactions occurred are identified.

INTERNATIONAL SEARCH REPORT

ternational Application No
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A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C07B61/00 G01N31/10 G01N33/53

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 C07B G01N B01J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal, WPI Data, PAJ, CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 99 51546 A (HARVARD COLLEGE ;JACOBSEN ERIC N (US); SIGMAN MATTHEW S (US)) 14 October 1999 (1999-10-14)	13,24
A	page 24, line 12 -page 24 page 40 -page 41 figures 1,5	1,18,20, 27
X	WO 98 03521 A (BEEK JOHANNES A M VAN ;TURNER HOWARD (US); BOUSSIE THOMAS (US); GO) 29 January 1998 (1998-01-29) page 12, line 11 -page 19, line 13 claims 1,5,79,80	24

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[X] Further documents are listed in the continuation of box C.

[X] Patent family members are listed in annex.

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Date of the actual completion of the international search	Date of mailing of the international search report
20 July 2001	30/07/2001

Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Tx. 31 651 epo nl, Fax: (+31–70) 340–3016	Held, P

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication,where appropriate, of the relevant passages	Relevant to claim No.
X	TERRETT N K ET AL: "COMBINATIONRIAL SYNTHESIS - THE DESIGN OF COMPOUND LIBRARIES AND THEIR APPLICATION TO DRUG DISCOVERY" TETRAHEDRON,NL,ELSEVIER SCIENCE PUBLISHERS, AMSTERDAM, vol. 51, no. 30, 24 July 1995 (1995-07-24), pages 8135-8173, XP000644580 ISSN: 0040-4020 page 8142, paragraph 3 -page 8143; figure 7 page 8151 -page 8152 page 8158, paragraph 2; figure 29 page 8159, last paragraph -page 8160; figure 32 ---	1,13,18, 20,24
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A	WO 99 21957 A (UNIV NORTH CAROLINA ;MORKEN JAMES P (US); TAYLOR STEVEN J (US)) 6 May 1999 (1999-05-06) figure 1 claims 1,21 ---	1,27
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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Information on patent family members

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