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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ZINC FINGER BINDING DOMAINS FOR CNN

(57) Abstract: Polypeptides that contain zinc finger-nucleotide binding regions that bind to nucleotide sequences of the formula CNN are provided. Compositions containing a plurality of polypeptides, polynucleotides that encode such polypeptides and methods of regulating gene expression with such polypeptides, compositions and polynucleotides are also provided.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/26388

A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : C07K 14/00; C12N 1/00, 5/00, 5/10, 15/11, 15/63 US CL : 435/243, 320.1, 325, 375; 530/300, 350; 536/23.1 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) U.S. : 435/243, 320.1, 325, 375; 530/300, 350; 536/23.1 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 practicable, search terms used) Please See Continuation Sheet																				
C. DOCUMENTS CONSIDERED TO BE RELEVANT																				
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.																		
Y	WO 98/54311 A1 (BARBAS et al) 03 December 1998 (03.12.1998), see entire document, especially the abstract.	1-3, 33-34, 36-74																		
Y	US 6,117,680 A (NATESAN et al) 12 September 2000 (12.09.2000), see entire document.	1-3, 33-34, 36-74																		
Y	US 6,205,404 B1 (MICHAELS et al) 20 March 2001 (20.03.2001), see entire document.	1-3, 33-34, 36-74																		
☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.																				
<table border="0"><tr><td colspan="2">* Special categories of cited documents:</td><td>"I" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</td></tr><tr><td>"A" document defining the general state of the art which is not considered to be of particular relevance</td><td></td><td>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</td></tr><tr><td>"E" earlier application or patent published on or after the international filing date</td><td></td><td>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</td></tr><tr><td>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</td><td></td><td>"&" document member of the same patent family</td></tr><tr><td>"O" document referring to an oral disclosure, use, exhibition or other means</td><td></td><td></td></tr><tr><td>"P" document published prior to the international filing date but later than the priority date claimed</td><td></td><td></td></tr></table>			* Special categories of cited documents:		"I" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention	"A" document defining the general state of the art which is not considered to be of particular relevance		"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone	"E" earlier application or patent published on or after the international filing date		"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art	"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)		"&" document member of the same patent family	"O" document referring to an oral disclosure, use, exhibition or other means			"P" document published prior to the international filing date but later than the priority date claimed		
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"P" document published prior to the international filing date but later than the priority date claimed																				
Date of the actual completion of the international search 23 March 2003 (23.03.2003)		Date of mailing of the international search report 18 APR 2003																		
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No.		Authorized officer Terry A. McKelvey Telephone No. 703-308-0196																		

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/26388

Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claim Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claim Nos.: 4-32 and 35
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
because the claims are drawn to specific sequences which could not be searched because no computer readable form of the sequences was filed.
3. ☐ Claim Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

☐
☐

The additional search fees were accompanied by the applicant's protest.

No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

PCT/US02/26388

Continuation of B. FIELDS SEARCHED Item 3:

EAST (USPATFUL, EPO, JPO, Derwent databases), Dialog OneSearch (biotech databases)

search terms: zinc finger, design?, creat?, modulat?, inhibit?, stimulat?, model?, fusion, fused, chimer?, hybrid?