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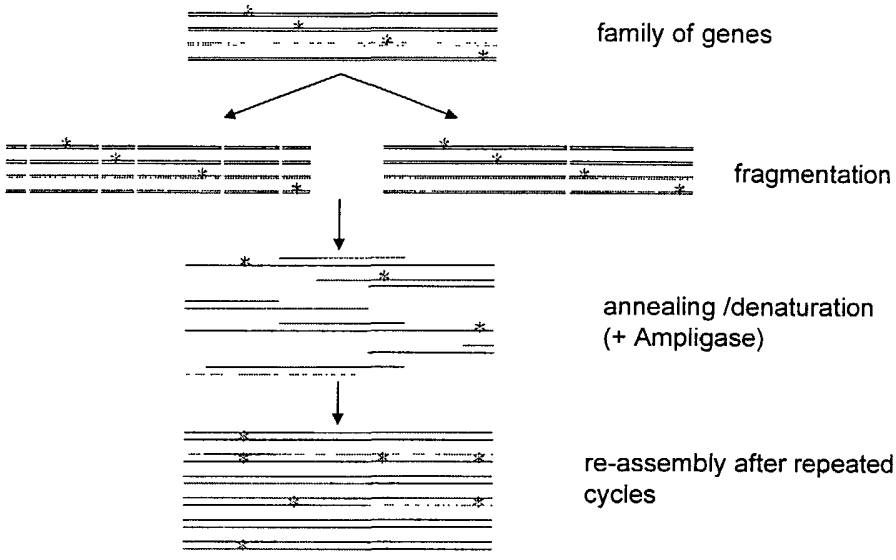
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(54) Title: PROCESS FOR PREPARING VARIANT POLYNUCLEOTIDES



(57) Abstract: The present invention discloses a process for the preparation of variant polynucleotides using a reassembly process of preferably blunt-ended restriction enzyme fragments prepared form a starting population of heterologous polynucleotides in the presence of a thermostable ligase.

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INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP 02/08222

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C12N15/10 C12Q1/68 //C12N9/80

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 C12N C12Q

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)
WPI Data, PAJ, CAB Data, SEQUENCE SEARCH, BIOSIS, EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	FR 2 782 323 A (PROTEUS) 18 February 2000 (2000-02-18) page 6, line 1 - line 37; claims 1,14,16	1-11
A	KIKUCHI M ET AL: "Novel family shuffling methods for the in vitro evolution of enzymes" GENE, ELSEVIER BIOMEDICAL PRESS. AMSTERDAM, NL, vol. 236, no. 1, 5 August 1999 (1999-08-05), pages 159-167, XP004175459 ISSN: 0378-1119 the whole document	

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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
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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	Hornig, H

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International Application No
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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.
A	BERGER S L ET AL: "PHOENIX MUTAGENESIS: ONE-STEP REASSEMBLY OF MULTIPLY CLEAVED PLASMIDS WITH MIXTURES OF MUTANT AND WILD-TYPE FRAGMENTS" ANALYTICAL BIOCHEMISTRY, ACADEMIC PRESS, SAN DIEGO, CA, US, vol. 214, 1993, pages 571-579, XP002043107 ISSN: 0003-2697 the whole document ---	
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