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(54) Title: NOVEL DNA POLYMERASE FROM THERMOANAEROBACTER TENGCONGENESIS

(57) Abstract: Disclosed is a DNA polymerase from Thermoanaerobacter tengcongensis. This enzyme is useful for procedures requiring strand-displacing DNA synthesis such as SDA and for reverse transcription. Included within the scope of the present invention are various mutants (deletion and substitution) that retain the ability to replicate DNA with substantially the same efficiency as the native Thermoanaerobacter tengcongensis polymerase.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

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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)

C12N

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, BIOSIS, WPI Data, Sequence Search

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DATABASE UniProt 1 June 2002 (2002-06-01), XP002473538 retrieved from EBI Database accession no. Q8RBE6 abstract -& DATABASE EMBL-SVA 16 December 2005 (2005-12-16), XP002473539 retrieved from EBI Database accession no. AE13054.1 abstract -& BAO QIYU ET AL: "A complete sequence of the T. tengcongensis genome" GENOME RESEARCH, COLD SPRING HARBOR LABORATORY PRESS, WOODBURY, NY, US, vol. 12, no. 5, May 2002 (2002-05), pages 689-700, XP002355673 ISSN: 1088-9051 ----- -/-	1-10

☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

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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

T 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

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

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

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Y	PAVLOV A R ET AL: "Recent developments in the optimization of thermostable DNA polymerases for efficient applications" TRENDS IN BIOTECHNOLOGY, ELSEVIER PUBLICATIONS, CAMBRIDGE, GB, vol. 22, no. 5, 1 May 2004 (2004-05-01), pages 253-260, XP004504365 ISSN: 0167-7799 the whole document	1-10
Y	ADAMS M W W: "ENZYMES AND PROTEINS FROM ORGANISMS THAT GROW NEAR AND ABOVE 100 DEG C" ANNUAL REVIEW OF MICROBIOLOGY, ANNUAL REVIEWS INC., PALO ALTO, CA, US, vol. 47, 1993, pages 627-658, XP000603156 ISSN: 0066-4227 the whole document	1-10

INTERNATIONAL SEARCH REPORT

Information on patent family members

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