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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: RECOMBINASE POLYMERASE AMPLIFICATION

(57) Abstract: This disclosure describes three related novel methods for Recombinase-Polymerase Amplification (RPA) of a target DNA that exploit the properties of the bacterial RecA and related proteins, to invade double-stranded DNA with single stranded homologous DNA permitting sequence specific priming of DNA polymerase reactions. The disclosed method has the advantage of not requiring tehrmocycling or thermophilic enzymes. Further, the improved processivity of the dislosed methods allow amplification of DNA up to hundreds of megabases in length.

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US03/05492

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C12P 19/34
US CL : 435/91.2

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. : 435/91.2

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.
X	US 5,223,414 A (ZARLING et al.) 29 June 1993 (29.06.1993), columns 8-9.	1-62
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A		63-72
X	US 5,273,881 A (SENA et al.) 28 December 1993 (28.12.1993), columns 17-19.	1-62
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A		63-72
X	US 5,670,316 A (SENA et al.) 23 September 1997 (23.09.1997), columns 18-20.	1-62
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A		63-72

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

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INTERNATIONAL SEARCH REPORT

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Continuation of B. FIELDS SEARCHED Item 3:
USPAT, PGPUB, DERWENT WPI, BIOSIS, MEDLINE
search terms: primer, recombinase, recA, amplification