

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
5 April 2007 (05.04.2007)

PCT

(10) International Publication Number  
**WO 2007/038422 A3**

(51) International Patent Classification:  
C12P 19/34 (2006.01)

(21) International Application Number:  
PCT/US2006/037238

(22) International Filing Date:  
26 September 2006 (26.09.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/721,138 26 September 2005 (26.09.2005) US

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(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP,  
KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT,  
LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ,  
NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU,  
SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR,  
TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT,  
RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA,  
GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

- with international search report
- before the expiration of the time limit for amending the  
claims and to be republished in the event of receipt of  
amendments
- with sequence listing part of description published sepa-  
rately in electronic form and available upon request from  
the International Bureau

(88) Date of publication of the international search report:  
6 December 2007

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

(54) Title: OLIGONUCLEOTIDES AS TEMPERATURE-SENSITIVE INHIBITORS FOR DNA POLYMERASES

(57) Abstract: Aspects of the invention relate to the use of novel oligonucleotides as temperature-sensitive inhibitors for ther-  
mostable DNA polymerases. Some inhibitors exhibit temperature-dependent and, in some cases, reversible inhibitory property by  
changing the conformation of at least a portion of the oligonucleotides from double-stranded to single stranded or in some cases  
vice versa in a temperature-dependent manner. Aspects also relate to the use of an the inhibitors in a hot-start PCR compositions,  
wherein the inhibitor may act to suppress the activity of the thermostable DNA polymerase below a desired activation temperature,  
Tact, and wherein the inhibitor is thermally inactivated above Tact, thus liberating the polymerase activity and initiating the DNA  
amplification process. Aspects further relate to a procedure for formulating the composition of a hot-start PCR reaction mixture.  
The hot-start PCR methods disclosed herein are generally faster, more flexible and lower in cost than existing methods.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US06/37238

**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC: C12P 19/34( 2006.01)

USPC: 436/91  
 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. : 436/ 91

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)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DANG et al. Oligonucleotide inhibitors of Taq DNA polymerase facilitate detection of low copy number targets by PCR. Journal of Molecular Biology, vol. 264, pages 268-278, 2000.	1-10

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

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Date of the actual completion of the international search 14 August 2007 (14.08.2007)	Date of mailing of the international search report 23 SEP 2007
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