

Title (en)  
MUTATED AND CHEMICALLY MODIFIED THERMALLY STABLE DNA POLYMERASES

Title (de)  
MUTIERTE UND CHEMISCH MODIFIZIERTE THERMISCH STABILE DNA-POLYMERASEN

Title (fr)  
MUTANTS D'ADN POLYMÉRASES THERMIQUEMENT STABLES MODIFIÉS CHIMIQUEMENT

Publication  
**EP 2300613 A2 20110330 (EN)**

Application  
**EP 09767773 A 20090618**

Priority  
• US 2009047862 W 20090618  
• US 7375408 P 20080618

Abstract (en)  
[origin: WO2009155464A2] A mutant thermally stable DNA polymerase having at least one Lysine to Arginine substitution corresponding to at least one of amino acid position 505, 540 or 542 of *Thermus aquaticus* Taq polymerase A. Said polymerase can also be chemically modified to substantially reduced polymerase activity at ambient temperatures, wherein the chemical modification modifies at least one Lysine residue of the polymerase and said reduced polymerase activity is reversible upon heating at a temperature of at least 50 0C. Methods for using and kits containing the mutant DNA polymerase and chemically modified, mutant DNA polymerase for primer extension and amplification, respectively, are also envisioned.

IPC 8 full level  
**C12N 15/54** (2006.01); **C12N 9/10** (2006.01); **C12N 9/12** (2006.01)

CPC (source: EP)  
**C12N 9/1252** (2013.01); **C12P 19/34** (2013.01); **C12Q 1/6848** (2013.01)

C-Set (source: EP)  
**C12Q 1/6848** + **C12Q 2527/101** + **C12Q 2521/101**

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)  
AL BA RS

DOCDB simple family (publication)  
**WO 2009155464 A2 20091223**; **WO 2009155464 A3 20100506**; EP 2300613 A2 20110330; EP 2300613 A4 20111109

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**US 2009047862 W 20090618**; EP 09767773 A 20090618