

Title (en)
ALLELE SPECIFIC PRIMER EXTENSION

Title (de)
ALLELSPEZIFISCHE PRIMERVERLÄNGERUNG

Title (fr)
EXTENSION D'AMORCE SPECIFIQUE A L'ALLELE

Publication
EP 1546353 A4 20060201 (EN)

Application
EP 03749279 A 20030829

Priority
• US 0327286 W 20030829
• US 40689402 P 20020829

Abstract (en)
[origin: WO2004020604A2] A method of characterizing a nucleic acid sample is provided that includes the steps of: (a) conducting a DNA polymerase reaction that includes the reaction of a template, an allele specific primer, at least one terminal phosphate-labeled nucleotide, DNA polymerase, and optionally an enzyme having 3' → 5' exonuclease activity when the primer is non-hydrolyzable, which reaction results in the production of labeled polyphosphate; (b) permitting the labeled polyphosphate to react with a phosphatase to produce a detectable species; (c) detecting the detectable species; and (d) characterizing the nucleic acid sample based on such detection.

IPC 1-7
C12P 19/34

IPC 8 full level
C12N 15/09 (2006.01); **C12Q 1/42** (2006.01); **C12Q 1/44** (2006.01); **C12Q 1/68** (2006.01)

CPC (source: EP)
C12Q 1/6869 (2013.01); **C12Q 1/6823** (2013.01); **C12Q 2600/156** (2013.01)

Citation (search report)
• [PX] WO 03020891 A2 20030313 - AMERSHAM BIOSCIENCES CORP [US]
• [PX] WO 03020734 A2 20030313 - AMERSHAM BIOSCIENCES CORP [US]
• [PX] WO 03020984 A2 20030313 - AMERSHAM BIOSCIENCES CORP [US]
• [XY] WO 0244425 A2 20020606 - VISIGEN BIOTECHNOLOGIES INC [US]
• [XY] US 6255083 B1 20010703 - WILLIAMS JOHN G K [US]
• [X] WO 0194609 A1 20011213 - LI COR INC [US], et al
• [X] WO 0070073 A1 20001123 - CORNELL RES FOUNDATION INC [US]
• See references of WO 2004020604A2

Citation (examination)
• WO 0148235 A2 20010705 - ADVANCED RES & TECH INST [US]
• JP 2002101899 A 20020409 - HITACHI LTD
• US 5849487 A 19981215 - HASE TETSU [JP], et al & US 2003046928 A1 20030313 - VAN NIEUWSTADT MICHEL JACQUES [US]
• SOOD ANUP ET AL: "Terminal phosphate-labeled nucleotides with improved substrate properties for homogeneous nucleic acid assays.", JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 2 MAR 2005 LNKD- PUBMED:15724985, vol. 127, no. 8, 2 March 2005 (2005-03-02), pages 2394 - 2395, XP002636624, ISSN: 0002-7863, DOI: 10.1021/JA043595X

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CA 2496462 A1 20040311; CA 2496462 C 20140128; EP 1546353 A2 20050629; EP 1546353 A4 20060201; JP 2005537001 A 20051208;
JP 4643263 B2 20110302

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