

Title (en)  
METHODS FOR PRODUCING MODIFIED NUCLEIC ACID MOLECULES

Title (de)  
METHODEN ZUR HERSTELLUNG VON MODIFIZIERTEN NUKLEINSÄUREMOLEKÜLEN

Title (fr)  
PROCEDES DE PRODUCTION DE MOLECULES NUCLEOTIDIQUES MODIFIEES

Publication  
**EP 1179095 A4 20041013 (EN)**

Application  
**EP 00937524 A 20000504**

Priority  
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• US 13339199 P 19990510

Abstract (en)  
[origin: WO0068428A1] A method for inserting a cassette into a nucleic acid molecule to produce a modified nucleic acid molecule, e.g., a nucleic acid-cassette fusion, is described. The method involves the use of polymerase chain reaction, thereby permitting precise targeting of the desired site in the molecule, but does not require ligation. Also described is the use of this method for high throughput screening the resulting modified nucleic acid molecules.

IPC 1-7  
**C12Q 1/68**; **C12P 19/34**

IPC 8 full level  
**C12N 15/09** (2006.01); **C07K 14/315** (2006.01); **C12N 15/10** (2006.01); **C12Q 1/68** (2006.01); **C12R 1/44** (2006.01)

CPC (source: EP)  
**C07K 14/3156** (2013.01); **C12N 15/10** (2013.01); **C12N 15/102** (2013.01)

Citation (search report)  
• [XY] WO 9633207 A1 19961024 - GLAXO GROUP LTD [GB], et al  
• [A] WO 9916904 A1 19990408 - HOPE CITY [US]  
• [X] NIKAWA J ET AL: "PCR- AND LIGATION-MEDIATED SYNTHESIS OF MARKER CASSETTES WITH LONG FLANKING HOMOLOGY REGIONS FOR GENE DISRUPTION IN SACCHAROMYCES CEREVISIAE", NUCLEIC ACIDS RESEARCH, OXFORD UNIVERSITY PRESS, SURREY, GB, vol. 26, no. 3, 1998, pages 860 - 861, XP002931027, ISSN: 0305-1048  
• [Y] CLAVERY J-P ET AL: "Construction and evaluation of new drug-resistance cassettes for gene disruption mutagenesis in Streptococcus pneumoniae, using an ami test platform", GENE, ELSEVIER BIOMEDICAL PRESS. AMSTERDAM, NL, vol. 164, no. 1, 1995, pages 123 - 128, XP004041930, ISSN: 0378-1119  
• [A] HORTON R M ET AL: "Engineering hybrid genes without the use of restriction enzymes: gene splicing by overlap extension", GENE, ELSEVIER BIOMEDICAL PRESS. AMSTERDAM, NL, vol. 77, 1989, pages 61 - 68, XP002090392, ISSN: 0378-1119  
• See references of WO 0068428A1

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)  
**WO 0068428 A1 20001116**; EP 1179095 A1 20020213; EP 1179095 A4 20041013; JP 2002543801 A 20021224

DOCDB simple family (application)  
**US 0012103 W 20000504**; EP 00937524 A 20000504; JP 2000616393 A 20000504