

Title (en)

IMPROVED COLUMN FOR DNA SEPARATION BY MATCHED ION POLYNUCLEOTIDE CHROMATOGRAPHY

Title (de)

VERBESSERTE KOLONNE ZUR DNA-TRENNUNG DURCH POLYNUKLEOTIDCHROMATOGRAPHIE MIT AUF EINANDER ABGESTIMMTEN IONEN

Title (fr)

COLONNE AMELIOREE POUR LA SEPARATION DE L'ADN EN CHROMATOGRAPHIE DE NUCLEOTIDES A IONS APPARIES (MIPC)

Publication

EP 1231993 A4 20030416 (EN)

Application

EP 00961961 A 20000918

Priority

- US 0025532 W 20000918
- US 15461499 P 19990917
- US 15874399 P 19991012
- US 16751599 P 19991124
- US 17717700 P 20000120
- US 50177500 A 20000210

Abstract (en)

[origin: WO0119485A1] An improved separation column and method for separating a mixture of double stranded DNA fragments by Matched Ion Polynucleotide Chromatography. The cylindrical column has an ID greater than about 5 mm and contains polymer beads. The beads have an average diameter of 1 to 100 microns and are unsubstituted polymer beads or are polymer beads substituted with a hydrocarbon moiety having from 1 to 1,000,000 carbons. The preferred beads are characterized by being substantially free from multivalent cations which are free to bind with DNA. The improved column provides enhanced separation of DNA fragments with sizes ranging from about 100 to 20,000 base pairs. The column also provides enhanced separation of heteroduplex and homoduplex DNA molecules in a mutation detection procedure in which the chromatography is performed under conditions effecting partial denaturation of DNA at a site of mismatched base pairs.

IPC 1-7

B01D 15/08; C12N 15/10

IPC 8 full level

B01J 20/281 (2006.01); **B01D 15/08** (2006.01); **B01D 15/36** (2006.01); **B01J 20/285** (2006.01); **C12M 1/00** (2006.01); **C12N 15/09** (2006.01); **C12Q 1/68** (2006.01); **G01N 30/34** (2006.01); **G01N 30/60** (2006.01); **G01N 30/88** (2006.01); **B01D 15/16** (2006.01); **B01D 15/20** (2006.01); **B01D 15/22** (2006.01); **G01N 30/02** (2006.01); **G01N 30/30** (2006.01)

CPC (source: EP US)

B01D 15/366 (2013.01 - EP US); **B01J 20/265** (2013.01 - EP); **B01J 20/285** (2013.01 - EP US); **B01D 15/166** (2013.01 - EP); **B01D 15/20** (2013.01 - EP); **B01D 15/22** (2013.01 - EP); **G01N 2030/3084** (2013.01 - EP)

C-Set (source: EP)

G01N 30/02 + B01D 15/366

Citation (search report)

- [X] WO 9907899 A1 19990218 - TRANSGENOMIC INC [US], et al
- [X] WO 9856797 A1 19981217 - TRANSGENOMIC INC [US], et al
- See references of WO 0119485A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT

DOCDB simple family (publication)

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DOCDB simple family (application)

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